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Rocky Flats Environmental Technology Site

BUILDING 865 HIGH BAY DEMOLITION PATH-FORWARD PLAN

REVISION 0

June 5, 2003



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Revision 0, 6/5/03 Page i

BUILDING 865 HIGH BAY DEMOLITION PATH-FORWARD PLAN

REVISION 0

June 5, 2003

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TABLE OF CONTENTS

A	BBREVIATIONS/ACRONYMSI'	V
1.	INTRODUCTION	1
2.	SCOPE	2
3.	BASIC STEPS	2
	3.1. Walls, Ceiling & 2nd Floor Mezzanine 3.2. Floors 3.3. Pits	. 2
4.	DETAILED STEPS – INCLUDING RATIONALE	3
	4.1.1. Walls, Ceiling & 2nd Floor Mezzanine 4.1.1. Perform a General Cleaning of Dusty Horizontal and Vertical Surfaces 4.1.2. Remove the Lower Two Meters of Wallboard. 4.1.4. Apply CC Fix to Wall, Ceiling & 2nd Floor Mezzanine Surfaces. 4.1.5. Perform Beryllium PDS of the Walls, Ceiling & 2nd Floor Mezzanine 4.1.6. Walls, Ceiling & 2nd Floor Mezzanine are now Ready for Demolition in Conjunction with the Floor. 4.2. FLOORS. 4.2.1. Perform a General Cleaning of Surfaces. 4.2.2. Perform a Modified PDS of Floors. 4.2.3. Apply InstaCote on Concrete Floor. 4.2.4. Demolish 865 High Bay Walls, Ceiling & 2nd Floor Mezzanine. 4.2.5. Remove and Manage Wall, Ceiling & 2nd Floor Mezzanine Debris as Sanitary/Be Waste. 4.2.6. Remove and Manage Floor as LLW/Be Waste 4.3.1. Option 1 – Soil Remediation Necessary. 4.3.1.1. Perform a General Cleaning of Dusty Surfaces. 4.3.1.2. Perform PDS of Pits.	3 3 4 4 4 5 5 5 6 8 8 8 9 9 9
	4.3.1.2. Perform PDS of PIIS	. 9 10
	4.3.2.1. Decontaminate Pit Surfaces Below Three Feet of Final Grade	10 10 10 11
5.	4.3.2.6. Demolish Pit Surfaces Above Three Feet of Final Grade in Conjunction with Floors . 1	11
6.	SUMMARY AND CONCLUSIONS1	2
7.		

ATTACHMENTS

I

7 F F F F F	CHINETIES
A	865 High Bay Wallboard Photos
В	865 High Bay Radiological Wall and Ceiling Survey Data
C	865 High Bay Beryllium Wall and Ceiling Sample Data
D	Tank 207 Demolition Survey Data
	D-1 Tank 207 Pre-Demolition Rad & Be Survey Data
	D-2 Tank 207 in-Process Demolition Rad & Be Survey Data
E	865 High Bay Brokk Demolition Test White Paper
F	Recent 865 High Bay In-process Radiological Floor and Pit Survey Data
G	865 High Bay Radiological Slab Core Data
H	980 Pad InstaCote Demolition Test White Paper
I	865 Building Slab Thickness Drawing

ABBREVIATIONS/ACRONYMS

ACM Asbestos Containing Material

Be Beryllium

CDPHE Colorado Department of Public Health and the Environment

D&D Decontamination and Decommissioning

DDCP Decontamination and Decommissioning Characterization Protocol

DOE U.S. Department of Energy
DPP Decommissioning Program Plan

EPA U.S. Environmental Protection Agency
FDPM Facility Disposition Program Manual
HSAR Historical Site Assessment Report
IHSS Individual Hazardous Substance Site
IWCP Integrated Work Control Package

K-H Kaiser-Hill

KHC Kaiser-Hill Construction

LLW Low-level waste

NORM Naturally occurring radioactive material

PDS Pre-demolition survey QC Quality Control

RCRA Resource Conservation and Recovery Act

RFCA Rocky Flats Cleanup Agreement

RFETS Rocky Flats Environmental Technology Site

RFFO Rocky Flats Field Office

RLC Reconnaissance Level Characterization

RLCR Reconnaissance Level Characterization Report

RSA Removable Surface Activity RSP Radiological Safety Practices

1. INTRODUCTION

The purpose of this Building 865 High Bay Demolitions Path-Forward Plan is to document the steps necessary to safely demolish the 865 Building High Bay after *RFCA RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* have been completed. The proposal assumes that all of the small and large equipment will already be stripped out and removed from the building. Thus, this proposal is applicable to the remaining floor, walls, ceiling, and pits of the 865 High Bay.

The following proposed demolition path-forward steps were derived based on an evaluation of many factors including: worker health and safety risks, protection of the environment, feasibility of success, waste disposal considerations, cost and schedule. Although many factors were considered when determining the best, most practical path-forward, worker health and safety risks and protection of the environment were the two main driving forces in determining this proposed path forward.

Section 3 below lists the basic overall steps for the proposed demolition path-forward. Section 4 below describes each basic step and provides that rationale as to why each step was chosen over the other options, as necessary. In Sections 3 and 4 below, the steps have been subdivided into three groupings: 1) Walls, ceiling & 2nd floor mezzanine, 2) Floors, and 3) Pits.

All of the below work steps can be performed within the framework of RFCA and the current Regulator approved RSOPs. Since the wall, ceiling & 2nd floor mezzanine surfaces will meet the unrestricted release criteria specified in the site *Pre-Demolition Survey Plan* and the *RFETS RSOP for Facility Disposition, the* walls, ceiling & 2nd floor mezzanine can be demolished utilizing the *RFETS RSOP for Facility Disposition*. The proposed demolition path-forward for the floor is to manage the floor as LLW/Be waste. Both the *RFETS RSOP for Facility Disposition* and the *RFETS RSOP for Routine Soil Remediation* discusses and specifies how to demolish and manage contaminated slabs, foundations, and footings. Section 6.6, *Building Foundation and Slab Removal*, of the *RFCA RSOP for Routine Soil Remediation*, specifies that the ER staff will remove the Building 865 slab.

Prior to demolition, a Clean Air Act radiological NESHAP modeling effort would be performed to ensure NESHAP ambient air emissions levels would not be exceeded. Additionally, a 6-point analysis will be performed prior to demolition per Section 3.8, Removal of Contaminated Portions of the Building Shell of RFCA RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities.

2. SCOPE

This report presents the Building 865 High Bay demolition path-forward plan once the *RFETS RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* are completed. The demolition of the Building 865 Low Bay is also included in this plan. The demolition of the Building 865 walls, ceiling & 2nd floor mezzanine will be performed in accordance with the *RFETS RSOP for Facility Disposition*. Environmental media beneath Building 865 slab is also discussed in this plan and slab and soil will be addressed in accordance with the *RFETS RSOP for Routine Soil Remediation*.

3. BASIC STEPS

3.1. Walls, Ceiling & 2nd Floor Mezzanine

- 1. Perform a general cleaning of dusty horizontal and vertical surfaces
- 2. Remove the lower two meters of wallboard
- 3. Perform radiological PDS of the walls, ceiling & 2nd floor mezzanine
- 4. Apply CC Fix to wall, ceiling & 2nd floor mezzanine surfaces
- 5. Perform beryllium PDS of the walls, ceiling & 2nd floor mezzanine
- 6. Walls, ceiling & 2nd floor mezzanine are now ready for demolition in conjunction with the floor

3.2. Floors

- 1. Perform a general cleaning of surfaces
- 2. Perform a modified PDS of floors
- 3. Apply InstaCote on concrete
- 4. Demolish 865 High Bay walls, ceiling & 2nd floor mezzanine
- 5. Remove and manage wall, ceiling & 2nd floor mezzanine debris as sanitary/Be waste
- 6. Remove and manage floor as LLW/Be waste

3.3. Pits

Currently there are two different potential path-forward options for managing the floor pits in the 865 High Bay. Which path-forward option is chosen will depend on the outcome of the 865 High Bay UBC soil sample results that have yet to be collected. If the UBC soil sample results show that soil remediation is necessary, then Option 1 will be chosen. If the UBC soil sample results show that soil remediation is not necessary, then Option 2 will be chosen. Option 2 will only be undertaken if soil remediation is not required, and decontamination of pits is successful after a reasonable expenditure of time and resources.

Option 1

- 1. Perform a general cleaning of dusty surfaces
- 2. Perform a modified PDS of pits
- 3. Apply CC Fix on concrete and fill in pits with gravel/soil
- 4. Demolish pits in conjunction with floors
- 5. Remove and manage pits as LLW/Be waste

Option 2

- 1. Decontaminated pit surfaces below three feet of final grade
- 2. Perform PDS of pits
- 3. Protect pit surfaces below three feet of final grade
- 4. Perform a general cleaning of dusty surfaces above three feet of final grade
- 5. Apply CC Fix on concrete and fill in pits with gravel/soil
- 6. Demolish pit surfaces above three feet of final grade in conjunction with floors
- 7. Remove and manage pit surfaces above three feet of final grade as LLW/Be waste

4. DETAILED STEPS - INCLUDING RATIONALE

4.1. Walls, Ceiling & 2nd Floor Mezzanine

4.1.1. Perform a General Cleaning of Dusty Horizontal and Vertical Surfaces
A general cleaning of the dusty surfaces of the horizontal and vertical surfaces of the walls, ceiling & 2nd floor mezzanine surfaces will be performed in order to ready the high bay for asbestos clearance surveys as well as gross decontamination of loose beryllium contamination.

4.1.2. Remove the Lower Two Meters of Wallboard

The lower two meters of wallboard will be removed to aid the decontamination of radiological and beryllium contamination, as well as aid in the PDS process. Unlike the upper walls, the lower walls have numerous puncture holes in the wallboard, thus making PDS scan surveys harder to perform. Additionally, the lower wallboard has a higher potential for contamination than the upper wallboard. Therefore, removing the wallboard below two meters was determined to be the safest path-forward. Refer to Attachment A for photos of the wallboard.

In-process characterization of the upper walls has been performed for radiological and beryllium contamination, no radiological contamination (fixed or loose) has been found. Refer to Attachment B for radiological survey results of the wallboard. Two (2) of the 25 High Bay grids were extensively characterized for beryllium, five (5) of the 104 smears were above 0.2 ug/100cm², with the highest being 0.7 ug/100cm². Additionally, on one section of the wall, the wallboard was removed from the wall, from ceiling to floor, and characterized behind. All beryllium smears behind the wallboard were <0.1 ug/100cm². Refer to Attachment C for survey results of the wallboard. The wallboard was securely installed during original construction of the building, and there was minimal chance for contamination to migrate behind the wallboard during past operations or D&D work. Removing the wallboard above two meters would require the use of high-reaching man-lifts and numerous man-hours at elevated heights to remove the wallboard. Therefore, leaving the wallboard intact above two meters was determined to be the safest path-forward.

4.1.3. <u>Perform Radiological Pre-Demolition Surveys (PDS) of the Walls, Ceiling & 2nd Floor Mezzanine</u>

A routine radiological PDS of the walls, ceiling & 2nd floor mezzanine will be performed to verify that all wall, ceiling & 2nd floor mezzanine surfaces meet the unrestricted release criteria specified in *the RFCA RSOP for Facility Disposition, Section 4.1, Table 3.* Prior to PDS verify all fixative has been removed.

- 4.1.4. Apply CC Fix to Wall, Ceiling & 2nd Floor Mezzanine Surfaces CC Fixative (a.k.a. CC Fix) will be applied to all wall, ceiling & 2nd floor mezzanine surfaces to fixate in any remaining residual loose beryllium contamination that may be on facility surfaces. Putting workers up on high-reaching man-lifts and spending numerous manhours at elevated heights to remove low-levels of residual beryllium (<1.0 ug/100cm²) is not worth risk, when a fixative can be easily and safely applied. Actual demolition work has shown that CC Fix is an excellent method to contain loose beryllium contamination and to prevent the spread during demolition work. Both the 207 Tank demolition and the 865 High Bay Brokk test have shown the fixative capabilities of the CC Fix. Refer to Attachment D for survey results of the 207 Tank demolition and Attachment E for results of the 865 High Bay Brokk demolition test. Additionally, CC Fix is successfully utilized around plant site on a routine basis to control and contain beryllium contamination. Therefore, applying fixative to the wall, ceiling and 2nd floor mezzanine surfaces was determined to be the safest path-forward.
- 4.1.5. Perform Beryllium PDS of the Walls, Ceiling & 2nd Floor Mezzanine After the fixative is applied to the wall, ceiling & 2nd floor mezzanine surfaces and has had time to cure, a routine beryllium PDS of the walls, ceiling & 2nd floor mezzanine will be performed to verify that they meet the unrestricted release criteria specified in the RFCA RSOP for Facility Disposition, Section 4.1, Table 3.

Table 3. Unrestricted Release Criteria

Contaminant	Requirement Source	Unrestricted Release Threshold
Beryllium	10 CFR 850.31	Loose surface contamination concentrations
		are less than 0.2 ug/100cm ²

4.1.6. Walls, Ceiling & 2nd Floor Mezzanine are now Ready for Demolition in Conjunction with the Floor

After the PDS of the walls, ceiling & 2nd floor mezzanine is completed and all data meets the unrestricted release criteria specified in *the RFCA RSOP for Facility Disposition*, *Section 4.1*, *Table 3*, the walls, ceiling & 2nd floor mezzanine will be prepared for demolition in conjunction with the main floor, once the main floor is ready for demolition (refer to steps 4.2.4 and 4.2.5).

4.2. Floors

4.2.1. Perform a General Cleaning of Surfaces

A general cleaning of the floors (i.e., using wet methods) will be performed in order to ready the 865 High Bay for asbestos clearance surveys, as well as gross decontamination of removable radiological and beryllium contamination. Based on recent in-process radiological surveys of floor, there is little if any removable contamination but a large amount of fixed contamination, especially in the cracks and seams of the floor. Refer to Attachment F for 865 High Bay in-process radiological floor and pit survey data, and Attachment G for slab core data.

Due to the inaccessible areas where contamination exists (i.e., in the slab seams, cracks, and potential under-building-contamination (UBC)), a complete decontamination of all remaining radiological and beryllium contamination was determined to be not practical prior to demolition. The prognosis for successfully achieving unrestricted free release levels of the slab disqualified this path-forward. The only possible method of completely decontaminating the slab would be to first scabble the entire floor surface to remove the fixed surface contamination. Then either saw-cut or jackhammer out every crack and seam. Remove any other slab area that contains UBC. And finally, remediate all UBC soil. The worker health and safety risks of performing this work is high due to the use of high-risk equipment such as dry scabblers, concrete saw cutters and jackhammers.

Just dry scabbling the floor surfaces would still leave the majority of the slab contaminated due to seam, crack and UBC contamination, and thus a large portion of the slab would still need to be managed as LLW. Therefore, performing a general cleaning versus a complete decontamination was determined to be the safest path-forward.

4.2.2. Perform a Modified PDS of Floors

A modified PDS of the floors will be performed to verify that the gross removable radiological and beryllium contamination has been removed, and to confirm final fixed radiological contamination levels of the floor prior to demolition. Note: the intent of this survey is not to verify that the floor meets the unrestricted release criteria per the *RFCA RSOP for Facility Disposition, Section 4.1, Table 3.*, but rather to document the actual LLW conditions of the slab prior to demolition. The modified PDS will include systematically gridded radiological total and removable measurements, and biased measurements at potential hot spot locations as normal. Beryllium PDS samples and chemical PDS samples (if required) will also be performed as normal. Radiological scanning will not be performed on the floor since scan data is not needed for waste disposal calculations, nor is it needed for *a priori* airborne calculations.

The slab will be dispositioned in a manner equivalent to Section 4., Demolition Approach of RFCA RSOP for Facility Disposition, which states: "If the slab, foundation or footing does not meet the unrestricted release criteria after decontamination activities or there is soil contamination beneath the slab, foundation or footing, the slab, foundation or footing will be removed beyond 3 feet below final proposed grade in accordance with the requirements of this RSOP. Figure 2 is a decision tree that documents the disposition of slabs, foundations and footings. The disposition of the soil beneath the facility is not within the scope of the RSOP, but will be addressed by Environmental Restoration (ER) in a separate RSOP." Figure 2, Slab/Foundation/Footing Disposition Process tree states that if the slab foundation or footing does not meet the unrestricted release criteria, it should be dispositioned in accordance with a PAM, IM/IRA, or DOP mod. Section 6.6, Building Foundation and Slab Removal, of the RFCA RSOP for Routine Soil Remediation, states that "ER staff will remove the following slabs and foundations: Building 865." Since the RFCA RSOP for Routine Soil Remediation is an equivalent document to a PAM or IM/IRA, and since numerous other contaminated slabs have been safely and efficiently removed utilizing the RFCA RSOP for Routine Soil Remediation (e.g., B123, 441, 662, and 663 slabs), K-H proposes utilizing this RSOP for the removal of the 865 building slab, foundations and footings.

4.2.3. Apply InstaCote on Concrete Floor

InstaCote SE polyurea (a.k.a. InstaCote) will be liberally and uniformly applied to the top of the concrete floor (a minimum of a ¼ inch thick layer). The purpose of the InstaCote is to 1) further lock down the already fixed radiological contamination, 2) lock down any remaining low-level removable beryllium contamination, and 3) protect and cushion the LLW floor from the impact of the falling wall, ceiling & 2nd floor mezzanine debris during demolition and during debris removal. The InstaCote will also provide a convenient seamless barrier between the clean wall, ceiling & 2nd floor mezzanine debris and the contaminated floor. While it is not expected that the InstaCote will make an impenetrable barrier during demolition, it is expected that the InstaCote will hold up adequately to prevent the spread of airborne contamination, and reduce the spread of removable and fixed contamination to a manageable level. All 865 High Bay InstaCoted demolition debris will be managed as LLW/Be waste.

InstaCote has been widely used around plantsite in order to effectively lock down contamination (both removable and fixed radiological and beryllium contamination) during the shipment of contaminated waste. Additionally, a demolition test was performed at the 980 Pad using clean demolition rubble to test the durability of InstaCote on slab concrete during demolition conditions. The test demonstrated that InstaCote holds up very well to demolition debris falling onto the InstaCoted concrete surfaces, and also holds up well to demolition heavy-equipment movement. Refer to Attachment H for the pre-demolition, in-process demolition, and post-demolition results of the 980 Pad InstaCote test.

During the 980 Pad InstaCote test, CC Fix was applied to one test pad area prior to applying the InstaCote, and another test pad area had InstaCote applied directly to the concrete with no CC Fix in between. During the test, the InstaCote adhered to the concrete much better without the intermediate layer of CC Fix, than with it, with no decrease in encapsulation efficiency. Therefore, the Project determined that it would be best management practice to apply the InstaCote directly to the floor.

Other floor covering options were evaluated, such as covering all or some of the floor with metal plates. However, hoisting and rigging hundreds of metal plates and securely fastening them to the slab posed unacceptably high worker health and safety risks. Over 450, 5 by 10 foot, ½ inch thick metal plates would be required to adequately cover the entire High Bay floor. If only the seams and cracks were covered, over 2,900 linear feet of ½ inch thick metal plates would be required to adequately cover all the contaminated seams and cracks in the High Bay.

Although the worker health and safety risks of performing this metal plate hoisting, rigging, and attaching work alone is very high, the structural integrity of metal plates would also be in question during demolition. The buckling effect of the slab that would take place next to each of the building support columns as the walls were brought down would disturb the metal plates next to the columns. With the use of InstaCote, this buckling effect will not have as large of an impact on protection of the slab, since the InstaCote would remain attached to the concrete during buckling movement.

As with InstaCote, there is no way to guarantee that all of the metal plates will remain intact during demolition, and it is likely some would move during demolition. However, when comparing the worker health and safety risks to applying InstaCote to the floor versus hoisting, rigging, and attaching metal plates to the floor, the InstaCote option was determined to be a much safer and more practical method of protecting the floor during demolition.

4.2.4. Demolish 865 High Bay Walls, Ceiling & 2nd Floor Mezzanine

Once the InstaCote had had an adequate time to fully cure, demolition of the 865 High Bay walls, ceiling & 2nd floor mezzanine would commence. As much as practical, demolition would be performed in such a manner as to minimize the amount of debris that falls on the InstaCoted floor. For example, when practical, walls would be pulled outward instead of pushing them inward. Additional radiological and beryllium air monitoring will be in-place during demolition activities. Periodic in-process radiological and beryllium characterization surveys will be performed on demolition debris and heavy-equipment during and after demolition activities on a per shift basis as a minimum.

The work area will be controlled to only necessary personnel, and appropriate PPE and hazard control permits will be in place for those entering the work area.

4.2.5. <u>Remove and Manage Wall, Ceiling & 2nd Floor Mezzanine Debris as</u> Sanitary/Be Waste

Once the High Bay walls, ceiling & 2nd floor mezzanine have been brought down, debris cleanup activities will commence. Extra Spotters and RCTs will be on hand during demolition debris cleanup to inspect for InstaCote on the sanitary debris. If any InstaCoted material is identified in the debris, that debris will be segregated and managed as LLW/Be waste. Waste that does not have InstaCote will be managed as sanitary/Be waste. Similar monitoring and work controls will be in place during debris removal activities as were in place during wall, ceiling & 2nd floor mezzanine demolition activities.

4.2.6. Remove and Manage Floor as LLW/Be Waste

Once the High Bay wall, ceiling & 2nd floor mezzanine debris cleanup activities are complete, floor removal will commence. Floor debris will be removed and managed as LLW/Be waste utilizing the RFCA RSOP for Routine Soil Remediation. Similar monitoring and work controls will be in place during floor removal activities as were in place during wall, ceiling & 2nd floor mezzanine demolition and cleanup activities. Additionally, whenever the InstaCote comes free from the concrete during removal activities, those concrete surfaces will be sprayed with CC Fix to minimize the potential for contamination spread. Prior to demolition of the building a drawing will be made showing the cracks and seams in the floor. This drawing will be referenced to determine additional biased soil sample locations for possible further soil remediation work during slab removal activities. Soil remediation should be performed in conjunction with concrete removal as much as practical to avoid cross-contamination of clean soil with contaminated soil, and vise-versa.

4.3. Pits

Currently, there are two different potential path-forward options for managing the floor pits in the 865 High Bay. Which path-forward option is chosen will depend on the outcome of the 865 High Bay UBC soil sample results that have yet to be collected. If the UBC soil sample results show that soil remediation is necessary, then Option 1 will be chosen. If the UBC soil sample results show that soil remediation is not necessary, then Option 2 will be chosen. Option 2 will only be undertaken if soil remediation is not required, and decontamination of pits is successful after a reasonable expenditure of time and resources.

While an Option 2 scenario is not likely based on what has been observed in other areas of the 865 High Bay slab (i.e., UBC contamination), it is included here as an alternative path-forward. Since there are several very thick pieces of concrete in the pits (>7 feet thick), it was determined that the safest approach for handling these areas was to decontaminate these surfaces below three feet of final grade to unrestricted release levels and leave them in place. There are also some equipment pads on the main floor that are very thick and fall into this same scenario, and may be handled in a similar manner after the portions of the pad above three feet of final grade are removed. Refer to Attachment I for a drawing depicting the various slab thicknesses in the 865 Building.

4.3.1. Option 1 – Soil Remediation Necessary

4.3.1.1. Perform a General Cleaning of Dusty Surfaces

Perform a general cleaning of dusty pit surfaces in the same manner as described for the floors in Section 4.2.1. The rationale for this step is the same rationale as described for the floors in Section 4.2.1.

4.3.1.2. Perform PDS of Pits

Perform a modified PDS of the pits in the same manner as described for the floors in Section 4.2.2. The rationale for this step is the same rationale as described for the floors in Section 4.2.2.

4.3.1.3. Apply CC Fix on Concrete and Fill in Pits with Gravel/Soil

Apply CC Fix to the concrete in the same manner as described for the walls and ceiling in Section 4.1.4. The rationale for this step is the same rationale as described for the walls and ceiling in Section 4.1.4. The pits will then be filled with clean gravel or soil, or some other adequate covering. The clean gravel/soil will protect the clean wall, ceiling & 2nd floor mezzanine debris from being cross-contaminated with the contaminated pit surfaces. Filling in the pits with gravel/soil will also protect the heavy demolition equipment from falling into the pits during debris removal activities.

4.3.1.4. Demolish Pits in Conjunction with Floors

Demolish the pits in conjunction with the floors in the same manner as described for the floors in Section 4.2.6. The rationale for this step is the same rationale as described for the floors in Sections 4.2.4 - 4.2.6. Soil remediation will be performed in manner that minimizes cross-contamination of clean soil with contaminated soil, and vise-versa.

4.3.2. Option 2– Soil Remediation Not Necessary

4.3.2.1. Decontaminate Pit Surfaces Below Three Feet of Final Grade

Decontaminate all pit surfaces below three feet of final grade to unrestricted release levels as described in the RFCA RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities and the RFETS RSOP for Facility Disposition. The rationale for not decontaminating the pit surfaces above three feet of final grade to unrestricted release levels is that this portion of the pit concrete will be removed and managed as LLW/Be waste in same manner as floors as described in Section 4.2.6. Pit surfaces below three feet of final grade will be left in-place after completion of the project, with no further actions required.

4.3.2.2. Perform PDS of Pits

Perform a routine PDS of pit surfaces below three feet of final grade to confirm that the unrestricted release levels described in the *RFETS RSOP for Facility Disposition* are met. Perform a modified PDS of pit surfaces above three feet of final grade in the same manner as described for the floors in Section 4.2.2. The rationale for a modified PDS of pit surfaces above three feet of final grade is a similar rational as described for the floors in Section 4.2.2.

4.3.2.3. Protect Pit Surfaces Below Three Feet of Final Grade

Pit surfaces below three feet of final grade will be protected from being contaminated by floor demolition debris, or from clean wall, ceiling & 2nd floor mezzanine debris, by filling in the pits with clean soil or gravel, or some other adequate covering. Filling in the pits with gravel/soil will also protect the heavy demolition equipment from falling into the pits during debris removal activities. Filling in the pits will also minimize demolition cleanup work during debris removal activities.

4.3.2.4. Perform a General Cleaning of Dusty Surfaces Above Three Feet of Final Grade

Perform a general cleaning of dusty pit surfaces above three feet of final grade in the same manner as described for the floors in Section 4.2.1. The rationale for this step is the same rationale as described for the floors in Section 4.2.1.

4.3.2.5. Apply CC Fix on Top of Concrete

Apply CC Fix on top of the concrete on pit surfaces above three feet of final grade in the same manner as described for the walls and ceiling in Section 4.1.4. The rationale for this step is the same rationale as described for the walls and ceiling in Section 4.1.4.

4.3.2.6. Demolish Pit Surfaces Above Three Feet of Final Grade in Conjunction with Floors

Demolish the pit surfaces above three feet of final grade in conjunction with the floors in the same manner as described for the floors in Section 4.2.6. The rationale for this step is the same rationale as described for the floors in Sections 4.2.4 – 4.2.6. In addition, removal any gravel/soil from the pits that could have become contaminated during demolition.

5. DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES

The demolition and disposal of Building 865 High Bay will generate a variety of wastes. Estimated waste types and waste volumes are presented below. The walls, ceiling & 2nd floor mezzanine demolition debris will be managed as sanitary/beryllium waste. The floor slab demolition debris will be managed as radioactive (LLW) and beryllium waste. Depending on the results of the underbuilding soil sample results that will be obtained in the near future, the floor pit demolition debris will be managed as radioactive (LLW) and beryllium waste, or sanitary/beryllium waste. All under-slab utilities and piping systems shall be managed as radioactive (LLW) and beryllium waste during demolition. None of the concrete debris will be used as backfill onsite in accordance with the *RFCA RSOP for Recycling Concrete*.

Location	Sanitary Waste (cu ft)	Sanitary/Be Waste (cu ft)	LLW/Be Waste (cu ft)		
865 High Bay	0	Walls/Ceiling 50,000	Slabs 21,000		
865 Low Bay	Walls/Ceiling Slabs 24,000	0	Slab Hot Spots 1,000		
865 Soil	0	0	6,000		

6. SUMMARY AND CONCLUSIONS

The purpose of this Building 865 High Bay Demolitions Path-forward Plan is to document the steps necessary to safely demolish the 865 Building High Bay after *RFCA RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* have been completed. The proposal assumes that all of the small and large equipment will already be stripped out and removed from the building. Thus, this proposal is applicable to the remaining floor, walls, ceiling, and pits of the 865 High Bay. Except for the small crack in the 865 Low Bay floor, all of the 865 Low Bay concrete meets the unrestricted release criteria specified in the *RFETS RSOP for Facility Disposition*.

The proposed demolition path-forward steps outlined in Sections 3 and 4 above were derived based on an evaluation of many factors including: worker health and safety risks, protection of the environment, feasibility of success, waste disposal considerations, cost and schedule. Although many factors were considered when determining the best, most practical path-forward, worker health and safety risks, and protection of the environment were the two main driving forces in determining this proposed path forward. The option of attempting to decontaminate and unconditionally release the facility surfaces in the 865 High Bay was discounted due to impracticality of achieving success. Radiological contamination has seeped between the cracks and seams of the slab, and potentially into the under-slab soil, to the extent that successfully achieving unconditional release of the slab prior to demolition is not feasible or practical. Any attempt to decontaminate and unconditionally release the slab would unnecessarily risk the D&D workers health and safety, with minimal chance of success.

A cost and schedule analysis was performed of the various options. Although the result of the analysis did show that cost and schedule savings would be gained by the proposed path-forward, the savings were not significant in terms of the overall project cost and schedule, and were not rated high in terms of decision making for the proposed path-forward.

Based on the applicable factors relating to demolition of the 865 Building, the proposed steps above were agreed upon by the subject-matter-experts working with and for the Project to ensure the demolition is accomplished safety. Each of the above steps were closely scrutinized from a safety and practicality aspect, and determined to be the safest path-forward from a worker health and safety risk standpoint, and protection of the environment standpoint. Although there is some risk with the proposed path-forward, as well as risks with all the possible options, including the option to attempt total decontamination, these risks are small and manageable.

Based on site experience and recent tests and small-scale demolitions, the use of CC Fix and InstaCote has shown that these products are excellent encapsulates and barriers to contamination spread. The 865 Project and product subject-matter-experts are confident that the risks of the proposed path-forward are reasonable and well within their capabilities of being safely managed during the demolition of the 865 building. Demolishing structures with contaminated slabs is not new to Rocky Flats. Safely demolishing contaminated structures such as Building 123, 441, 442, 662, 663 slabs, and Tank 207 has been safely performed and managed in the recent past.

All of the proposed path-forward steps above can be performed within the framework of RFCA and the current Regulator approved RSOPs. Since the wall, ceiling & 2nd floor mezzanine surfaces will meet the unrestricted release criteria specified in the site *Pre-Demolition Survey Plan* and the *RFETS RSOP for Facility Disposition*, the walls, ceiling & 2nd floor mezzanine can be demolished utilizing the *RFETS RSOP for Facility Disposition*. The proposed demolition path-forward for the floor is to manage the floor as LLW/Be waste. Both the *RFETS RSOP for Facility Disposition* and the *RFETS RSOP for Routine Soil Remediation* discusses and specifies how to demolish and manage contaminated slabs, foundations, and footings. Section 6.6, *Building Foundation and Slab Removal*, of the *RFCA RSOP for Routine Soil Remediation*, specifies that the ER staff will remove the Building 865 slab due to the UBC concerns.

Based on the above analysis, the 865 Project proposes to utilize this Building 865 High Bay Demolition Path-Forward Plan to complete the demolition of the 865 building. This path-forward was determined to be the safest to the workers and the environment, and still meet project objectives within a reasonable timeframe. Regulator involvement and participation will continue to be encouraged during the additional planning and execution of this demolition path-forward plan.

7. REFERENCES

DOE/RFFO, CDPHE, EPA, 1996. Rocky Flats Cleanup Agreement (RFCA), July 19, 1996.

K-H, 1999. Decommissioning Program Plan, June 21, 1999.

MAN-131-QAPM, Kaiser-Hill Team Quality Assurance Program, Rev. 1, November 1, 2001.

MAN-076-FDPM, Facility Disposition Program Manual, Rev. 3, January 1, 2002.

MAN-077-DDCP, Decontamination and Decommissioning Characterization Protocol, Rev. 4, July 15, 2002.

MAN-127-PDSP, *Pre-Demolition Survey Plan for D&D Facilities*, Rev. 1, July 15, 2002.

RFETS RSOP for Facility Disposition, Rev. 0, August 14, 2000.

RFETS RSOP for Facility Component Removal, Size Reduction, and

Decontamination Activities, Rev. 2, November 4, 2002

RFETS RSOP for Routine Soil Remediation, January 2002

RFETS, RFCA RSOP for Recycling Concrete, Rev. 0, September 28, 1999

Reconnaissance Level Characterization Report for the Building 865 High Bay, dated September 17, 2001, Revision 0.

Building 865 Historical Site Assessment Report, incorporated as part of the Building 865 High Bay RLCR, dated July 2001.

ATTACHMENT A 865 High Bay Wallboard Photos

ATTACHMENT B

865 High Bay Radiological Wall and Ceiling Survey Data

ATTACHMENT C

865 High Bay Beryllium Wall and Ceiling Sample Data

ATTACHMENT D

Tank 207 Demolition Survey Data

ATTACHMENT E

865 High Bay Brokk Demolition Test White Paper

ATTACHMENT F

Recent 865 High Bay In-process Radiological Floor and Pit Survey Data

ATTACHMENT G

865 High Bay Radiological Slab Core Data

ATTACHMENT H

980 Pad InstaCote Demolition Test White Paper

ATTACHMENT I

865 Building Slab Thickness Drawing

ATTACHMENT A 865 High Bay Wallboard Photos

Photos Best Available Copy







ATTACHMENT B

865 High Bay Radiological Wall and Ceiling Survey Data

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

INSTRUMENT DATA										
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra	Survey ty	e: Contamin	ation		
Model	2929	Model _	2929	Model	DP-6	Building:	865			
Serial#_	176082	Serial #	176102	Serial #	3124	Location:	High bay va	rious wall lo	cations	
Cal Due	6-11-03	Cal Due	6-9-03	Cal Due	9/24/03	Purpose:	Survey for d	emo		
Bkg.	0.2 cpm α	Bkg.	0.2 cpm α	Bkg.	2 cpm α					
Efficiency	35.5 %	Efficiency	34.4 %	Efficienc	y 21.8 %	RWP #:		03 - 865-00)1	
MDA	18 dpm α	MDA	18 dpm α	MDA _	43 dpm α					
						Date:	5-20-03	Time:	1400	
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra			V		

11						, -				
Mfg.	Ludlum	Mfg.	Ludlum	Mfg1	NE Electra					
Model	2929	Model	2929	Model	DP-6					
Serial #	176082	Serial # _	176102	Serial #	3124	, , , , ,	rimi name	j	Signature	ешр. #
Cal Due	6-11-03_	Cal Due _	6-9-03	Cal Due	9/24/03			<u>ئ</u>	,'	
Bkg	79.2 cpm β	Bkg.	68.5 cpm β	Bkg.	582 cpm β	RCT:	N/A		N/A	 N/A
Efficiency	38.6 %	Efficiency	40.8 %	Efficiency	30.8 %		Print name		Signature	Emp. #
MDA _	205 dpm β	MDA	205 dpm β	MDA	373 dpm β					
if									***************************************	

PRN/REN#: N/A

Comments Isotope of concern is Depleted Uranium (U-238). Surveyed the wall and the insulation removed for the

D&D of building 865. Various areas surveyed with the results of less than MDA.

All insulation removed and placed in cargo for disposal. Results below are for each section surveyed.

Swipe			<u>ALPHA</u>		BETA			
#	LOCATION/DESCRIPTION	Swipe	Direct	Wipe	Swipe	Direct	Wipe	
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe	
1	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
2	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
3	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
4	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
5	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
6	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
7	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
8	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
9	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
10	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
11	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
12	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
13	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
14	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A	
15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
20	N/A	N/A	N/A	N/A	N/A a	N/A	N/A	

Date Reviewed: 5/20/03 RS Supervision:



ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE INSTRUMENT DATA Mfg. Mfg. Ludlum Mfg. NE Electra Survey type: Alpha, beta Contamination Model Model NA 2929 Model DP-6 Building: 865 Serial # NA Serial # 176082 Serial # 3250 Location: High bay (various locations) Cal Due NA Cal Due 6/11/03 Cal Due 7/13/03 Purpose: In-progress job coverage Bkg. NA cpm α Bkg. 0.4 cpm α Bkg. 7 $cpm \alpha$ Efficiency NA % Efficiency 35.5 % 21.8 22.1 % RWP#: 03-865-001 MDA NA dpm α MDA 18 dpm α MDA 68 dpm α Date: 5/19/03 Time: 1000 Mfg. NA Mfg. Ludlum Mfg. NE Electra DP-6 Model NA Model 2929 Model Serial # NA Serial # 176082 3250 Serial # Cal Due NA Cal Due 6/11/03 Cal Due 7/13/03 Bkg. Bkg. 83.2 cpm β 641 cpm β NA cpm β Bkg. RCT: N/A N/A N/A Efficiency NA % Efficiency 38.6 % 31.0 % Print name Efficiency Signature Emp.# **MDA** 205 dpm β NA dpmβ MDA MDA 389_dpmβ

PRN/REN#: N/A

Comments Survey taken to support on-going D&D activities.

The High Bay is Posted Contamination Area, RWP and TLD Required for Entry.

RS Supervision:

SURVEY RESULTS

Swipe	wipe		<u>ALPHA</u>	1	<u>BETA</u>			
#	LOCATION/DESCRIPTION	Swipe	Direct	Wipe	Swipe	Direct	Wipe	
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe	
1	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA	
2	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA	
3	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA	
4	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA	
5	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA	
6	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA	
7	Wall of Trench	NA	NA	<68	NA	NA	485	
8	Floor of Trench	NA	NA	<68	NA	NA	485	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NA	NA	NA	NA	
NA	NA	NA	NA	NĄ	NA	NA	NA	

Date Reviewed: 5/19/03

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Mfg.	NA	Mfg.	Ludlum	Mfg.	NE Electra	Survey typ	e: Alpha.	beta Contar	mination	
Model	NA	Model	2929	Model	DP-6	Building:				
Serial#	NA	Serial #	147735	Serial #	3124	1		(various loc	cations)	
Cal Due	NA	Cal Due	11/16/03	Cal Due	9/24/03	g.		ss job cover		****
Bkg.	NA cpm α	Bkg.	0.1 cpm α	_	4 cpm α					
Efficiency	NA %	Efficiency		Efficiency		RWP#:		03-865	5-001	
MDA	NA dpm α	MDA	18 dpm α	MDA	56 dpm α	_			· · · · · · · · · · · · · · · · · · ·	
						Date:	5/21/03	Time:	100	0
Mfg.	NA	Mfg.	Ludlum	Mfg.	NE Electra					
Model	NA	Model	2929	Model	DP-6	RC				
Serial #	NA	Serial #	147735	Serial #	3124					
Cal Due	N A	Cal Due	11/16/03	Cal Due	9/24/03					
Bkg.	NA cpm β	Bkg.	72.8 cpm β	Bkg.	497 cpm β	RCT:	N/A	/ 1	N/A	N/A
Efficiency	NA %	Efficiency		Efficiency		1	rint name		nature	Emp. #
MDA	NA dpm β	MDA	205 dpm β	MDA	346 dpm β)	K.
he High E	Bay is Posted (Contaminati	on Area, RWI							
The High E	Bay is Posted (Contaminati	on Area, RWI							
				SURVE	Required for				BETA	
Swipe #			on Area, RWI	SURVE	Required for EY RESULT Swipe	TS ALPHA Direct	Wipe	Swipe	Direct	
Swipe #	LOC	CATION/DI	ESCRIPTION	SURVE	Required for EY RESULT Swipe dpm/100cm2	ALPHA Direct dpm/100cm2	dpm/wipe	dpm/100cm2	Direct dpm/100cm2	dpm/wip
Swipe #	LOC Wall afte	CATION/DI	ESCRIPTION	SURVE	Required for EY RESULT Swipe dpm/100cm2 <18	ALPHA Direct dpm/100cm2 <56	dpm/wipe NA	dpm/100cm2 <205	Direct dpm/100cm2 <346	dpm/wip NA
Swipe #	LOC Wall afte Wall afte	CATION/DI r removing r removing	ESCRIPTION	SURVE 6 ft) 6 ft)	Required for EY RESULT Swipe dpm/100cm2	ALPHA Direct dpm/100cm2	dpm/wipe	dpm/100cm2	Direct dpm/100cm2	dpm/wip
Swipe # 1 2 3 4	LOC Wall afte Wall afte Wall afte	CATION/DE r removing r removing r removing r removing	ESCRIPTION insulation (To insulation (To insulation (To insulation (To insulation (To	SURVE 6 ft) 6 ft) 6 ft) 6 ft)	Required for EY RESULT Swipe dpm/100cm2 <18 <18	ALPHA Direct dpm/100cm2 <56 <56	dpm/wipe NA NA	dpm/100cm2 <205 <205	Direct dpm/100cm2 <346 <346	dpm/wip NA NA NA NA NA
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Swipe # 1 2 3 4 5 6 7 8 NA NA NA NA NA NA	Wall afte Wall afte Wall afte Wall afte Wall afte Wall afte	CATION/DI r removing r removing r removing r removing r removing Beam prior Beam prior NA NA NA	insulation (To insulation (To insulation (To insulation (To insulation (To insulation (To to cutting to cutting A	SURVE 6 ft) 6 ft) 6 ft) 6 ft) 6 ft)	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <	ALPHA Direct dpm/100cm2 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <57 <56 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <5	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 NA NA NA NA NA NA NA N	dpm/wipi NA
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Swipe # 1 2 3 4 5 6 7 8 NA	Wall afte Wall afte Wall afte Wall afte Wall afte Wall afte	r removing removing removing removing removing removing Beam prior NA NA NA NA NA NA NA NA NA	insulation (To to cutting to cutting A A A A A A A A A A A A A A A A A A A	SURVE 6 ft) 6 ft) 6 ft) 6 ft) 6 ft)	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <	ALPHA Direct dpm/100cm2 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <50 <50 <50 <50 NA	Manya NANANANANANANANANANANANANANANANANANANA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 NA NA NA NA NA NA NA N	dpm/wip NA
Swipe # 1 2 3 4 5 6 7 8 NA NA NA NA NA NA NA	Wall afte Wall afte Wall afte Wall afte Wall afte Wall afte	cation/Difference in removing removing removing removing removing Beam prior Beam prior NA NA NA NA NA NA NA	ESCRIPTION insulation (To insulation (To insulation (To insulation (To insulation (To insulation (To r to cutting to cutting A A A A A A A A A A A A A A A A A A A	SURVE 6 ft) 6 ft) 6 ft) 6 ft) 6 ft)	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <	ALPHA Direct dpm/100cm2 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <57 <56 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <57 <5	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 NA NA NA NA NA NA NA N	dpm/wip NA
Swipe # 1 2 3 4 5 6 7 8 NA	Wall afte Wall afte Wall afte Wall afte Wall afte Wall afte	CATION/DE r removing r removing r removing r removing r removing r removing Beam prior NA	insulation (To recently to cutting to cutting AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	SURVE 6 ft) 6 ft) 6 ft) 6 ft) 6 ft)	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <	ALPHA Direct dpm/100cm2 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <56 <50 <50 <50 <50 <50 <50 <50 <50 <50 <50 <50 <50 NA NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 NA NA NA NA NA NA NA N	dpm/wip NA
Swipe # 1 2 3 4 5 6 7 8 NA	Wall afte Wall afte Wall afte Wall afte Wall afte Wall afte	CATION/DE r removing r removing r removing r removing r removing r removing Beam prior NA	insulation (To to cutting to cutting A A A A A A A A A A A A A A A A A A A	SURVE 6 ft) 6 ft) 6 ft) 6 ft) 6 ft)	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <	ALPHA Direct dpm/100cm2 <56 <56 <56 <56 <56 <56 <56 <56 <56 NA NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 <346 NA NA NA NA NA NA NA N	dpm/wip NA



ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE INSTRUMENT DATA Mfg. Ludlum Mfg. Ludlum Mfg. NE Electra Survey type: Contamination Model 2929 2929 Model Model DP-6 Building: 865 Serial # 176082 Serial # 176102 Serial # 3252 Location: High bay Northeast wall Cal Due Cal Due 6-11-03 Cal Due 6-9-03 7-13-03 Purpose: Survey for removal of Wall Insulation Bkg. 0.4 cpm α Bkg. $0.5 \text{ cpm } \alpha$ Bkg. 6 cpm α Efficiency 35.5 % Efficiency RWP#: 34.4 % Efficiency 21.4 % 03-865-001 18 dpm α MDA MDA 18 dpm α MDA 66 dp<u>m α</u> 5-12-03 Date: Time: 1500 Mfg. Ludlum Mfg. Ludlum NE Electra Mfg. Model 2929 Model 2929 Model DP-6 RC7 Serial # 176082 Serial # 176102 Serial # 3252 Cal Due 6-11-03 Cal Due 6-9-03 Cal Due 7-13-03 Bkg. 77.5 cpm β 70.4 cpm β Bkg. 518 cpm β Bkg. RCT: N/A N/A Efficiency 38.6 % Efficiency 40.8 % Efficiency 30.1 % Print name Signature Emp. # **MDA** 205 dpm β MDA 205 dpm β 361 dpmβ MDA PRN/REN#: N/A Comments Isotope of concern is Depleted Uranium (U-238). Survey for the wall in the High bay Northeast wall. ALPHA BETA Swipe LOCATION/DESCRIPTION Swine Direct Wine Swine Direct Wine

#	BOOM TON DEBOND TON	Swipe	Direct	wipe	Swipe	Direct	wipe
 		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Northeast wall at opening to room 171	<66	<66	N/A	<361	<361	N/A
2	Northeast wall at opening to room 171	<66	<66	N/A	<361	<361	N/A
3	Northeast wall at opening to room 171	<66	<66	N/A	<361	<361	N/A
4	Northeast wall at opening to room 171	<66	<66	N/A	<361	<361	N/A
5	Northeast wall at opening to room 171	<66	<66	N/A	<361	700	N/A
6	Northeast wall at opening to room 171	<66	<66	N/A	<361	700	N/A
7	Northeast wall at opening to room 171	<66	<66	N/A	<361	700	N/A
_ 8	Northeast wall at opening to room 171	<66	<66	N/A	<361	700	N/A
9	Insulation Removed	<66	<66	N/A	<361	700	N/A
10	Insulation Removed	<66	<66	N/A	<361	700	N/A
11	Insulation Removed	<66	<66	N/A	<361	700	N/A
12	Insulation Removed	<66	<66	N/A	<361	700	N/A
13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Date R	Reviewed: <u>5/12/03</u> RS Supervision:						
11							

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			IENT DATA							
	Ludlum	Mfg.				Survey typ		nination		
Model	2929	Model	2929	Model	DP-6	Building:	865			
Serial#	176082	Serial #	176102	Serial #	3248	Location:	High bay	various wal	Il locations	
Cal Due	6-11-03	Cal Due	6-9-03	Cal Due	7-9-03	Purpose:	Survey fo	r demo		
Bkg.	0.4 cpm α	-	0.4 cpm α					V	***************************************	
Efficien	cy 35.5 %		34.4 %			RWP#:		03-865	5-001	
	18 dpm α	•			***************************************		······································			
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Mfg.	Ludlum	Mfg.	Ludlum	N 1€~	NE Electro	Date.	3-13-03	1 11116.	093	U
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Model	2929	Model _		Model		F				
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Bkg			65.0 cpm β	Bkg.	474 cpm β	RCT:	·····	/ 1	N/A /	N/A
Efficien	cy <u>38.6 %</u>	Efficiency	40.8 %	Efficiency	y <u>29.8 %</u>	P	rint name	Sig	nature	Emp.
MDA _	205 dpm β	MDA	205 dpm β	MDA	349 dpm β					
Comme	nts Isotope of building 865.					the wall and	the insul	ation remov	ed prior to	
							i the insul	ation remov		
Comme	building 865. A	All insulation	n removed was	s disposed	of in cargo.	<u>ALPHA</u>			BETA	
Comme D&D of	building 865. A	All insulation		s disposed	of in cargo.	ALPHA Direct	Wipe	Swipe	BETA Direct	····
Comme D&D of Swipe	building 865. A	All insulation	e removed was	s disposed	Swipe dpm/100cm2	ALPHA Direct dpm/100cm2	Wipe dpm/wipe	Swipe	BETA Direct dpm/100cm2	dpm/wip
Comme D&D of Swipe #	building 865. A	All insulation CATION/DI	n removed was ESCRIPTION	s disposed	Swipe dpm/100cm2 <18	ALPHA Direct dpm/100cm2 <33	Wipe dpm/wipe N/A	Swipe dpm/100cm2 <205	BETA Direct dpm/100cm2 <349	dpm/wip N/A
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Print Name

Emp.#

Signature

ATTACHMENT C

865 High Bay Beryllium Wall and Ceiling Sample Data

Richen, Mike

From:

Richen, Mike

Sent:

Wednesday, April 30, 2003 3:50 PM

To:

Richen, Mike; Lesinski, Mark; Clifton, John; 'bcorb@ecc.net'; McGrory, Mike; Hanson, Jack;

Parsons, Duane: Daniels, Kevin

Cc:

Miller, Gregg; Boley, Charles; Holwager, LeeAnn; Hiebert, Doug

Subject:

REMOVABLE BERYLLIUM WIPE SAMPLES ON WALLS & CEILINGS GRIDS 16 & 20

(03Z1329)

PURPOSE

To provide representative removable beryllium surface contamination levels of the ceiling and wall areas of the high bay building 865.

SCOPE

Collect approximately twenty (20) removable beryllium wipe samples from each ceiling and wall area associated with two representative sections of the building 865 high bay. Approximately twenty (20) samples will be collected from each area, that is twenty (20) from the ceiling and twenty (20) from the wall in each grid. The walls in the high bay are covered by an approximately two (2) in thick bat of fiberglass with a silver foil surface. The following additional samples will be collected from the indicated area. This will provide information about the crevices in the concrete seams, wall penetrations, and horizontal surfaces that will remain after the high bay of b 865 is completely stripped.

Wall

- some horizontal protruding systems
- · crevices, seams, cut outs
- wall penetrations

Ceiling

- downward facing surfaces
- horizontal surfaces that will be left
- holes through the twin Ts
- seams

Grids 16 and twenty were chosen for the following reasons. Grid 16 was the approximate location of the beryllium refinery which had very high levels of beryllium contamination. Grid 20 was the approximate location of the Erie Ram and near the Steam Hammer, two large pieces of metal working equipment.

DISCUSSION

IH collected one hundred and four (104) removable beryllium wipe samples from the ceilings and walls in grids 16 and 20 of the high bay of building 865 from April 15 until 22, 2003. Of the one hundred and four (104) samples seven resulted in detectable levels of beryllium i.e. > 0.1 ug/100cm2. Ninety three percent (93%) of the samples were non detectable, i.e. <0.1 ug/100cm2. A map is available documenting the locations of the samples.

The detectable results are as follows.

Grid		_ug/100cm2
16	wall	0.346
	wall, top of duct	0.218
	wall	0.398
	ceiling, top of beam	0.656
	ceiling, top of beam	0.7
	ceiling, "u" hanger	0.167
20	Ceiling	0.143

There were no detectable beryllium levels found in cracks, holes in the Twin Ts, or under fiberglass on the walls.

CONCLUSIONS

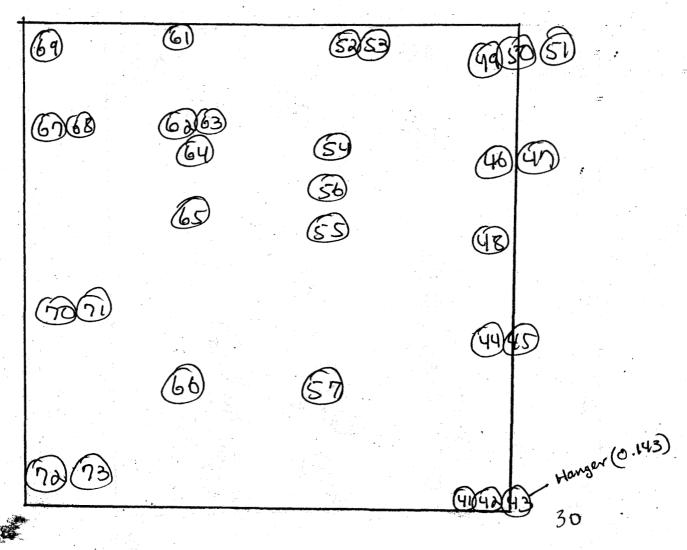
14

1. Results show more removable contamination in grid 16 as expected.

2. Results show the amount of removable contamination was lower on the walls than the floors as expected.

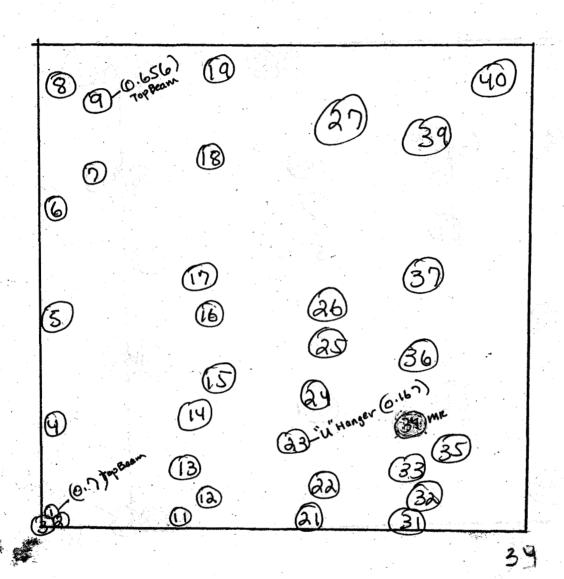
Michael J. Richen, CIH Rocky Flats Closure Site Services 10808 Highway 93

10808 Highway 93 Unit B, Building 883 Golden, Colorado 80403-8200 (303) 966-2337 Section 20, High Bay, 1865 4/15/03 Cieling MJRichan (0.4x)mylwoca2



N Dup

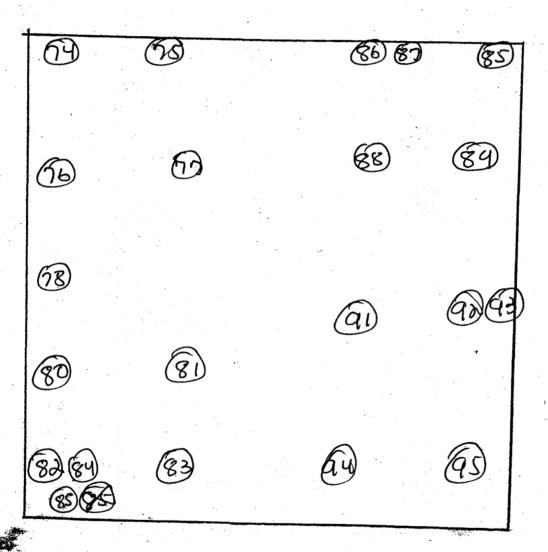
To Section 16, High Bay, B 865 4/15/03 Cieling MJRichan



N N E

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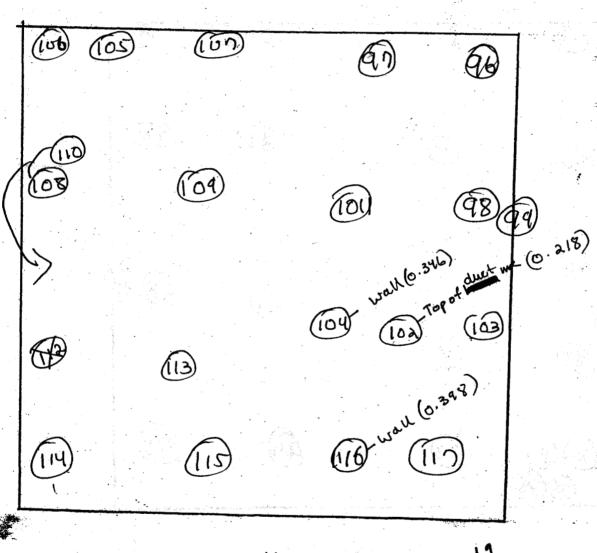
Section 20, High Bay, \$ 865 4/15/03 Wall



N Z down

20

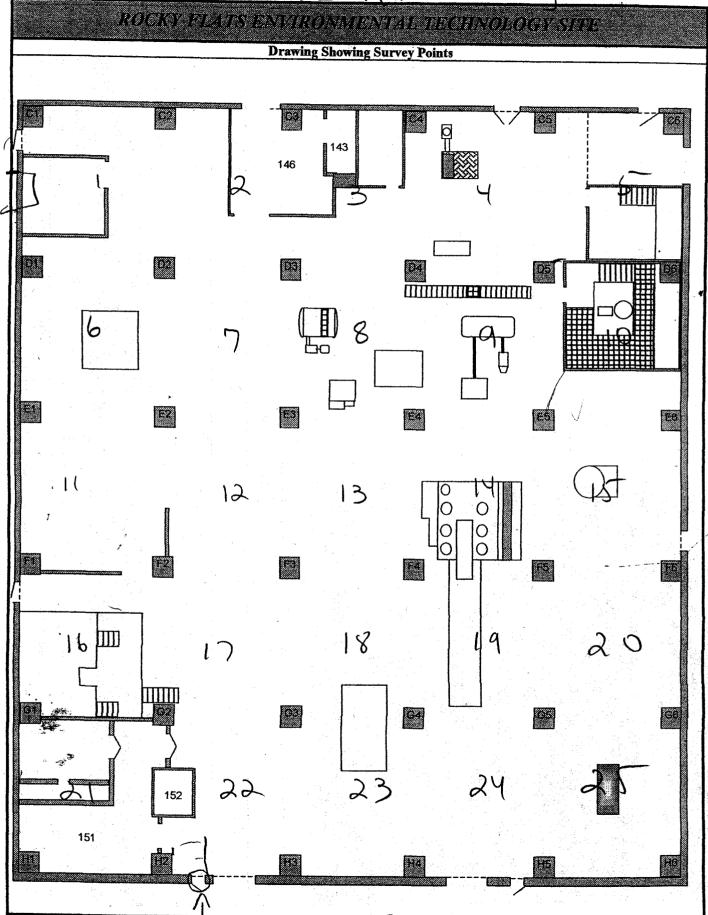
Section 16, High Day 13865 4/15/03



S down

45

GRID MAP Building 865



3-PRO-164-RSP-07.01 (effective 7/12/01)

16 generate

Page 3 of 3

Checked By (print/sign): Sequence # Sample 200 304 200 So W 202 Bidg. -Example: 865-09022000-310 865-04162003-602 Sample Prefix: Room エス スス ユス エグ Point on survey map Jan Cup As best S B WルーRocky Flats Environmental Technology Site Best Bases B Wile Sample Log N. will toward west fiberaliss of fail tape W will bound Mank thoughts install Wwell bowned 5 tibers in toil Swell toward E, Fiberplus W/ Feel, CA HS JHA# Ewell, Estaples w/ foil, col, E6 037-1393 Description **忍N**#: Empl.#: 9 7 Looks like Riberglass Signature: 01/6/ take, col colc2 ie deviations from 100cm2) Notes ⊢ of ⊢

Shaded area = 100cm2

Date:

IHISR_SURFACE_SAMPLE

Date: 04/29/2003 Page: 1 of 11 RIN: 03Z1329 Sample Number/Type: 865-04152003-54-001 WIPE Hygienist: MIKE RICHEN Location Info: TOP BEAM Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: 0.7000 UG/100CM2 Sample Number/Type: 865-04152003-54-002 WIPE Hygienist: MIKE RICHEN Location Info: CEILING Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-003 WIPE Location Info: HOLE IN BEAM Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-004 WIPE Location Info: CEILING Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-005 WIPE Location Info: CEILING Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 _ UG/100CM2 Concentration: Sample Number/Type: 865-04152003-54-006 WIPE Hygienist: MIKE RICHEN Location Info: CEILING Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-007 WIPE Location Info: ROOF DRAIN Room No: HIGH BAY Analyte: BERYLLIÚM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 UG/100CM2 Sample Number/Type: 865-04152003-54-008 Hygienist: MIKE RICHEN WIPE Location Info: CEILING Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Sample Number/Type: 865-04152003-54-009 WIPE Hygienist: MIKE RICHEN Location Info: TOP BEAM Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: 0.6560 UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-010 BLANK **Location Info:** Room No: Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 UG Sample Number/Type: 865-04152003-54-011 WIPE Hygienist: MIKE RICHEN Location Info: HOLE IN BEAM Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Sample Number/Type: 865-04152003-54-012

DOES NOT CONTAIN
OFFICIAL USE ONLY INFORMATION
Should be seen 11/5/08

Name/OrgShymlogh/pac Date 11/5/08
Dite(Xed by: JA. Nesheim M4713-

IHISR_SURFACE_SAMPLE

Date: 04/29/2003 Page: 2 of 11
RIN: 03Z1329

KIN: 0321325

Sample Number/Type: 865-04152003-54-012 WIPE Hygienist: MIKE RICHEN Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-013 WIPE Hygienist: MIKE RICHEN

Location Info: CRACK

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-014 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-015 WIPE Hygienist: MIKE RICHEN

Location Info: CRACK

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-016 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-017 WIPE Hygienist: MIKE RICHEN Location Info: HOLE

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-018 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-019 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-020 BLANK Hygienist: MIKE RICHEN

Location Info:

Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG

Sample Number/Type: 865-04152003-54-021 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-022 WIPE Hygienist: MIKE RICHEN

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-023 WIPE Hygienist: MIKE RICHEN

Location Info: HOLE

IHISR_SURFACE SAMPLE

Date: 04/29/2003 Page: 3 of 11

RIN: 03Z1329

Sample Number/Type: 865-04152003-54-023 WIPE Hygienist: MIKE RICHEN

Location Info: "U" HANGER COMPOSITE

Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)**

Concentration: 0.1670 UG/100CM2

Sample Number/Type: 865-04152003-54-024 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte:

Concentration: < 0.1000 _ UG/100CM2

Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-025 WIPE

Location Info: CRACK Room No: HIGH BAY

BERYLLIUM AND BE COMPOUNDS (AS BE) Analyte:

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-026 Hygienist: MIKE RICHEN WIPE

Location Info: CEILING

Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-027 **WIPE** Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte:

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-028 **BLANK** Hygienist: MIKE RICHEN

Location Info: Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

< 0.1000 _ UG Concentration:

Sample Number/Type: 865-04152003-54-029 **BLANK** Hygienist: MIKE RICHEN

Location Info:

Room No: Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

< 0.1000 _ UG Concentration:

Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-030 **BLANK**

Location Info:

Room No: **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte:

Concentration: < 0.1000 _ UG

Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-031 WIPE

Location Info: TOP BEAM

Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

< 0.1000 UG/100CM2

Concentration:

Sample Number/Type: 865-04152003-54-032 Hygienist: MIKE RICHEN WIPE

Location Info: CEILING

Room No: HIGH BAY BERYLLIUM AND BE COMPOUNDS (AS BE) Analyte:

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-033 WIPE Hygienist: MIKE RICHEN

Location Info: HOLE

Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte:

Concentration: < 0.1000 _ UG/100CM2

Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-035 WIPE

IHISR_SURFACE_SAMPLE

Date: 04/29/2003 Page: 4 of 11

RIN: 03Z1329

Sample Number/Type: 865-04152003-54-035 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-036 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-037 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING
Room No: HIGH BAY
Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000_UG/100CM2

Sample Number/Type: 865-04152003-54-038 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-039 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-040 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-041 WIPE Hygienist: MIKE RICHEN

Location Info: TOP BEAM

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-042 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-043 WIPE Hygienist: MIKE RICHEN

Location Info: HANGER

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: 0.1430 _ UG/100CM2

Concentration: 0.1430 UG/100CM2

Sample Number/Type: 865-04152003-54-044 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING WIPE Hygienist: MINE RICHEN

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-045 WIPE Hygienist: MIKE RICHEN
Location Info: CRACK

Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-046 WIPE Hygienist: MIKE RICHEN

IHISR_SURFACE_SAMPLE

Date: 04/29/2003 Page: 5 of 11 RIN: 03Z1329 Sample Number/Type: 865-04152003-54-046 **WIPE** Hygienist: MIKE RICHEN Location Info: ROOF DRAIN Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Concentration: < 0.1000 _ UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-047 WIPE Location Info: CEILING Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 UG/100CM2 Concentration: Sample Number/Type: 865-04152003-54-048 WIPE Hygienist: MIKE RICHEN Location Info: CEILING Room No: HIGH BAY BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Sample Number/Type: 865-04152003-54-049 WIPE Hygienist: MIKE RICHEN Location Info: TOP BEAM Room No: HIGH RAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte: Concentration: < 0.1000 _ UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-050 **WIPE** Location Info: CEILING Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte: < 0.1000 _ UG/100CM2 Concentration: Sample Number/Type: 865-04152003-54-051 **WIPE** Hygienist: MIKE RICHEN Location Info: CRACK Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Concentration: < 0.1000 _ UG/100CM2 Sample Number/Type: 865-04152003-54-052 **WIPE** Hygienist: MIKE RICHEN Location Info: Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte: < 0.1000 _ UG/100CM2 Concentration: Sample Number/Type: 865-04152003-54-053 WIPE Hygienist: MIKE RICHEN Location Info: HOLE Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte: Concentration: < 0.1000 _ UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: WIPE 865-04152003-54-054 Location info: CEILING Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Concentration: < 0.1000 _ UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-055 WIPE Location Info: CEILING Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte: Concentration: < 0.1000 _ UG/100CM2 Sample Number/Type: 865-04152003-54-056 WIPE Hygienist: MIKE RICHEN Location Info: CEILING Room No: HIGH BAY BERYLLIUM AND BE COMPOUNDS (AS BE) Analyte: Concentration: < 0.1000 _ UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-057 WIPE

HISR_SURFACE_SAMPLE

Date: 04/29/2003 Page: 6 of 11

RIN: 03Z1329

Sample Number/Type: 865-04152003-54-057 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-058 BLANK Hygienist: MIKE RICHEN

Location Info: Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG

Sample Number/Type: 865-04152003-54-059 BLANK Hygienist: MIKE RICHEN

Location Info:

Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG

Sample Number/Type: 865-04152003-54-060 BLANK Hygienist: MIKE RICHEN

Location Info:

Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG

Sample Number/Type: 865-04152003-54-061 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-062 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-063 WIPE Hygienist: MIKE RICHEN

Location Info: HOLE
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-064 WIPE Hygienist: MIKE RICHEN

Location Info: CREVICE/CRACK

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-065 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-066 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-067 WIPE Hygienist: MIKE RICHEN
Location Info: CEILING

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-068 WIPE Hygienist: MIKE RICHEN



IHISR_SURFACE_SAMPLE

Date: 04/29/2003 Page: 7 of 11

RIN: 03Z1329

Sample Number/Type: 865-04152003-54-068 WIPE Hygienist: MIKE RICHEN

Location Info: BEAM

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-069 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-070 BLANK Hygienist: MIKE RICHEN Location Info:

Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG

Sample Number/Type: 865-04152003-54-071 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING BY HOUSE VAC LINE

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-072 WIPE Hygienist: MIKE RICHEN

Location Info: CRACK

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-073 WIPE Hygienist: MIKE RICHEN

Location Info: CEILING

Location Info: WALL

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-074 WIPE Hygienist: MIKE RICHEN

Location Info: TOP BEAM

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-075 WIPE Hygienist: MIKE RICHEN Location Info: WALL

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-076 WIPE Hygienist: MIKE RICHEN

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Namber/Type: 865-04152003-54-077 WIPE Hygienist: MIKE RICHEN

Location Info: WALL

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-078 WIPE Hygienist: MIKE RICHEN

Location Info: WALL

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-079 WIPE Hyglenist: MIKE RICHEN

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: 04/29/2003				Page:	8 of 1
03Z1329					***
Sample Number/Type: Location Info:	WALL	WIPE	Hygienist: MIKE RICHEN		
Room No:	HIGH BAY	Analyte: Concentration:	BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-080	WIPE	Hygienist: MIKE RICHEN	e 1 a villa de la composición de la co La composición de la	-
Location Info: Room No:		Analyte: Concentration:	BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 _ UG/100CM2	A CONTRACTOR OF THE CONTRACTOR	
Sample Number/Type:	865-04152003-54-081	WIPE	Hygienist: MIKE RICHEN	ा है। हो पूर्व से हो। इ.स.	jas ————————————————————————————————————
Location Info: Room No:		Analyte: Concentration:	BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 _ UG/100CM2	i Harita i Mikaba i i i i i i i i i i i i i i i i i i	
Sample Number/Type:	965 04452002 54 002	WIPE	Hygienist: MIKE RICHEN		
	WALL			er filmfalle film Geografia	
		Analyte: Concentration:	BERYLLIUM AND BE COMPOUNDS (AS BE)	•	
Sample Number/Type:	955 04452002 E4 092	WIPE	< 0.1000 _ UG/100CM2 Hygienist: MIKE RICHEN	• · · · · · · · · · · · · · · · · · · ·	7 1
Location Info:	· ·		BERYLLIUM AND BE COMPOUNDS (AS BE)	A taga kencelah dalam An asalah	
•		Analyte: Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-084	WIPE	Hygienist: MIKE RICHEN	and was a first the	
Location Info:	HANGER HIGH BAY		다 하는 사람들이 되었다. 그 사람들이 다 그 사람들이 다 되었다. 	Algerta.	
		and the second s	BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-085	WIPE	Hygienist: MIKE RICHEN		
Location info:			en e		
ROOM NO:	HIGH BAY	Analyte: Concentration:	BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 _ UG/100CM2		· ·
Sample Number/Type:	865-04152003-54-086	WIPE	Hygienist: MIKE RICHEN		
Location Info: Room No:		าก ฟัก กลีก <u>บ</u> และอ <u>บ</u> กัน อ เก็			
• •		Analyte: Concentration:	BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 _ UG/100CM2		
Sample Number/Type: Location Info:	865-04152003-54-087 CUT OUT, BARE WALL	WIPE	Hygienist: MIKE RICHEN	Register version in a source register of the con-	
Room No:	and the second s	Analyte: Concentration:	BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 _ UG/100CM2	1.471.41	
Sample Number/Type:		WIPE	Hygienist: MIKE RICHEN		· · · · · · · · · · · · · · · · · · ·
Location Info:				A Section	
Room No:	HIGH BAY	Analyte: Concentration:	BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 _ UG/100CM2		
Sample Number/Type:		WIPE	Hygienist: MIKE RICHEN		જુલ કે પ્ર
Location Info: Room No:	WALL HIGH BAY	Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)	e de la compaña	

IHISR_SURFACE_SAMPLE Date: 04/29/2003 Page: 9 of 11 RIN: 03Z1329 Sample Number/Type: 865-04152003-54-090 BLANK · Hygienist: MIKE RICHEN Location Info: Room No: **BERYLLIUM AND BE COMPOUNDS (AS BE)** Concentration: < 0.1000 _ UG Sample Number/Type: 865-04152003-54-091 WIPE Hygienist: MIKE RICHEN Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 UG/100CM2 Sample Number/Type: 865-04152003-54-092 **WIPE** Hygienist: MIKE RICHEN Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 UG/100CM2 Concentration: Sample Number/Type: 865-04152003-54-093 WIPE Hygienist: MIKE RICHEN Location Info: BEAM, N SIDE Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Sample Number/Type: 865-04152003-54-094 WIPE Hygienist: MIKE RICHEN Location Info: WALL Room No: HIGH BAY

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-095 WIPE Hygienist: MIKE RICHEN

Location Info: WALL

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-096 WIPE Hyglenist: MIKE RICHEN
Location Info: WALL

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-097 WIPE Hygienist: MIKE RICHEN

Location Info: WALL
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG/100CM2

Sample Number/Type: 865-04152003-54-098 WIPE Hygienist: MIKE RICHEN
Location Info: WALL

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-099 WIPE Hygienist: MIKE RICHEN

Location Info: UNDER FIBERGLASS

Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 _ UG/100CM2

Sample Number/Type: 865-04152003-54-100 BLANK Hygienist: MIKE RICHEN Location Info:

Room No: Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

Concentration: < 0.1000 UG

Sample Number/Type: 865-04152003-54-101 WIPE Hygienist: MIKE RICHEN

IHISR_SURFACE_SAMPLE

Date: 04/29/2003 Page: 10 of 11 RIN: 03Z1329 Sample Number/Type: 865-04152003-54-101 WIPE Hygienist: MIKE RICHEN Location Info: WALL Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte: < 0.1000 UG/100CM2 Concentration: Sample Number/Type: 865-04152003-54-102 WIPE Hygienist: MIKE RICHEN Location Info: TOP OF BEAM Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** Analyte: **Concentration:** 0.2180 UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-103 WIPE Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Sample Number/Type: 865-04152003-54-104 **WIPE** Hygienist: MIKE RICHEN Location Info: Room No: HIGH BAY Analyte: **BERYLLIUM AND BE COMPOUNDS (AS BE)** 0.3460 _ UG/100CM2 Concentration: Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-105 **WIPE** Location Info: TOP OF DUCT Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 UG/100CM2 Concentration: Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-106 **WIPE** Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Sample Number/Type: Hygienist: MIKE RICHEN 865-04152003-54-107 WIPE Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-108 WIPE Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-109 WIPE Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Sample Number/Type: 865-04152003-54-110 **WIPE** Hygienist: MIKE RICHEN Location Info: BRACKET Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-112 WIPE Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) < 0.1000 UG/100CM2 Concentration: Sample Number/Type: 865-04152003-54-113 Hygienist: MIKE RICHEN WIPE

IHISR_SURFACE_SAMPLE

Location Info: Room No:

Date: 04/29/2003 Page: 11 of 11 RIN: 03Z1329 Sample Number/Type: 865-04152003-54-113 Hygienist: MIKE RICHEN WIPE Location Info: WALL Room No: HIGH BAY **BERYLLIUM AND BE COMPOUNDS (AS BE)** < 0.1000 _ UG/100CM2 Concentration: Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-114 WIPE Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 UG/100CM2 Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-115 **WIPE** Location Info: WALL Room No: HIGH BAY Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 _ UG/100CM2 WIPE Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-116 Location Info: DOOR Room No: HIGH BAY BERYLLIUM AND BE COMPOUNDS (AS BE) Analyte: 0.3980 _ UG/100CM2 Concentration: Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-117 **BLANK** Location Info: Room No: BERYLLIUM AND BE COMPOUNDS (AS BE) Analyte: Concentration: < 0.1000 _ UG Hygienist: MIKE RICHEN Sample Number/Type: 865-04152003-54-118 **BLANK** Location Info: Room No: Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE) Concentration: < 0.1000 UG Hygienist: MIKE RICHEN BLANK Sample Number/Type: 865-04152003-54-119

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)

< 0.1000 _ UG

Concentration:

° ×	1	1	1 1				0.34 Pero	T			·	<u>.</u>						0.398 W	0.398pg	Le select	· .		J Jcm2
Page 7 of 3					Notes le deviations from 100cm2)																		Shaded area = 100cm2
Log		#:	9: MV		Notes (le deviation																		
Technology Site Beryllium Wipe Sample Log	Sampler (print):	Employee #:	Signature:												-								
gy Site Berylliu																						, ,	Date:
ntal Technolo								duct						mele	0								Empl.#:
Rocky Flats Environmental	RIN #:	03Z	IWCP#:		Description	ball	ኋ	TOP OF	ł.) 1	۲۲ ،	1	Braules	No Sam	1725	11	- 1 - 1	.	Dooy	Blance)/\	N (1)	EM
	X:	54	IH# 2000-310		Point on Survey map	103	Jan	201	901	(0)	801	601	017		113	<u>Σ</u>	211	911	(1)		#		
		ď	dg Date - IH# Example: 865-09022000-310		Коот	103 High buy)									\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							(print/sign): _
• laC		865	Bidg Exam	٠	Sequence #	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	Checked By (print/sign):
- 60	, ,		•				÷		•		•				143	孝			·				

0.218mg Page 6 of Shaded area = 100cm2 (le deviations from 100cm2 Signature: MA Rocky Flats Environmental Technology Site Beryllium Wipe Sample <u>Log</u> Employee # Sampler (print) Cut out I have wall Under fiberaliss TOBOY DECLARA Empl.#: Besentiation Dlank Blank Sull Beam RIN#: Wald Liall Ju M 03Z STAN STAN _ 1 IWCP#: Survey map 9 9 9 9 88 9 A A <u>ه</u> 50 80 70 93 93 5 0 Example: 865-09022000-310 865 ,04152003 54 Sample Prefix: Sequence # Room 86 High Dan Checked By (print/sign): Date -

88

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9

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100

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102

Page 4 of 3 Shaded area = 100cm2 (ie deviations from 100cm2) Notes * , z Signature: Employee #: Rocky Flats Environmental Technology Site Beryllium Wipe Sample L Sampler (print): Date: Crevil, Grank Empl.#: Creling Cielina Description Cielinia Beam RIN# Hole 03Z 1406 ۲ _ ۲ IWCP#: 6 survey map S 96 \ \ \ \ \ SP 05 6 બ िऽ 5 <u>%</u> 2 En Pointon ر اخ SS 9 Example: 865-09022000-310 865 ,04152003 54 Sample Prefix: Checked By (print/sign): Room 52 High Duy 89 Sequence # 99 67 64 65 28 29 8 62 63 55 26 61 53 54 57

The same of the sa	
Description Creling It It Creling	865 ,04152003 54 03 dg Date - IH# Example: 865-09022000-340
Creling Li Li Li Li Li Li Li Li Li L	on
Top beanh Hanger Chellny Klanger Crack Rosted frain Top Beanh Cieling Crack	34 Cel
Top beam Cieling Cieling Cyack Cieling Cyack Cyack Cieling Cyack Cyack Coult	35 11
Top beauth Top beauth Cielling Cielling Cielling Cielling Cielling Cracic Cooling Cooling Cooling	36 10
Top beam Top beam Crack Crack Rost dynin Tof ling Crack Cr	
Top beaun Cielling Crack Crack Roof dyain Toppean Cieling	
Top beaun Ciellny Crack Rost dyain Ciellny Ciellny Crack	
Ciellnig Crack Roof dynin Tol Bean Cielnig Crock Cro	<u> </u>
Crack Cielini Cielini Cielini Crack Crack Crack	42 Cie
Crack Roof dyain Cieling Cieling Crack Crack	43 Ham
Roof dyain Cieliny Creeking Crack	44 C16
Roof dyain Cieling Creling	45
Cieling Craule Craule	46 Ro
Topsen	امن رابا
Cieling	٦ کام
	ya Tel Bea
Crack	50 Cielin
	51 Crocol

Page 2 of Shaded area = 100cm2 Z Z ** Signature: Rocky Flats Environmental Technology Site Beryllium Wipe Sample Sampler (prin Employee U" hawager comp No Sample Empl.#: Top beauti Blank Creling 1tolo Blank C relinia Crack Description RIN# 03Z _ IWCP#: Room survey map R るる 33 3 $\mathcal{L}_{\mathcal{N}}$ 7 28 30 75 20 5 3 Example: 865-09022000-310 865 ,04152003 54 Sample Prefix: Checked By (print/sign): 18 H. Bay Date -6 20 7 22 23 24 25 26 27 28 29 30 31 32 33 34



Johns Manville Corporation 10100 West Ute Avenue (80127)

P.O. Box 625005 Littleton, CO 80162-5005

Tel: (303) 978-3724

COVER PAGE

RECEIVED 1003

April 25, 2003

Sherry Scaggiari

Rocky Flats Environmental Technology Site

10808 Highway 93, Unit B

Golden, CO 80403-8200

Laboratory Report ID: 03042403

Laboratory Name:

Johns Manville IH Lab

Subcontract Number:

KH020005

RIN:

03Z1329

Requestor:

N. Richen

P.O./Charge Code:

EED50285

Dear Ms. Scaggiari:

The Johns Manville Industrial Hygiene Laboratory has performed the following analytical testing services as requested. The results were calculated based upon the information supplied on the submission form. All laboratory data have been filed and are available upon request. The Johns Manville Laboratory is accredited by the American Industrial Hygiene association (AIHA) in the industrial hygiene program (Certificate #056), and participates in the AIHA ELPAT program.

If you have any questions, please call (303) 978-2584.

I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the RFETS specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Sincerely,

Scott Steiner
Industrial Hygiene Project Manager
April 25, 2003

Laboratory Report ID:

03042403

Laboratory Name:

Johns Manville IH Lab

Subcontract Number:

KH020005

RIN:

03Z1329

Requestor:

N. Richen

P.O./Charge Code:

EED50285

Bottle	Customer	Laboratory	Line Item	Sample	Instrument
Number(s)	Number(s)	ID Number(s)	Code	Matrix	Run
03Z1329-001.001	865-04152003-054-001	03042403-001	IH01D104	SWIPE	PB030424-G
03Z1329-002.001	865-04152003-054-002	03042403-002	IH01D104	SWIPE	PB030424-G
03Z1329-003.001	865-04152003-054-003	03042403-002	IH01D104	SWIPE	PB030424-G
03Z1329-004.001	865-04152003-054-004	03042403-004	IH01D104	SWIPE	PB030424-G
03Z1329-005.001	865-04152003-054-005	03042403-005	IH01D104	SWIPE	PB030424-G
03Z1329-006.001	865-04152003-054-006	03042403-006	IH01D104	SWIPE	PB030424-G
03Z1329-007.001	865-04152003-054-007	03042403-007	IH01D104	SWIPE	PB030424-G
03Z1329-008.001	865-04152003-054-008	03042403-007	IH01D104	SWIPE	PB030424-G
03Z1329-009.001	865-04152003-054-009	03042403-009	IH01D104	SWIPE	PB030424-G
03Z1329-010.001	865-04152003-054-010	03042403-010	IH01D104	SWIPE	PB030424-G
03Z1329-011.001	865-04152003-054-011	03042403-011	IH01D104	SWIPE	PB030424-G
03Z1329-012.001	865-04152003-054-012	03042403-012	IH01D104	SWIPE	PB030424-G
03Z1329-013.001	865-04152003-054-013	03042403-013	IH01D104	SWIPE	PB030424-G
03Z1329-014.001	865-04152003-054-014	03042403-014	IH01D104	SWIPE	PB030424-G
03Z1329-015.001	865-04152003-054-015	03042403-015	IH01D104	SWIPE	PB030424-G
03Z1329-016.001	865-04152003-054-016	03042403-016	IH01D104	SWIPE	PB030424-G
03Z1329-017.001	865-04152003-054-017	03042403-017	IH01D104	SWIPE	PB030424-G
03Z1329-018.001	865-04152003-054-018	03042403-017	IH01D104	SWIPE	PB030424-G
03Z1329-019.001	865-04152003-054-019	03042403-019	IH01D104	SWIPE	PB030424-G
03Z1329-020.001	865-04152003-054-020	03042403-020	IH01D104	SWIPE	PB030424-G
03Z1329-021.001	865-04152003-054-021	03042403-021	IH01D104	SWIPE	PB030424-G
03Z1329-022.001	865-04152003-054-022	03042403-022	IH01D104	SWIPE	PB030424-G
03Z1329-023.001	865-04152003-054-023	03042403-023	IH01D104	SWIPE	PB030424-G
03Z1329-024.001	865-04152003-054-024	03042403-024	IH01D104	SWIPE	PB030424-G
03Z1329-025.001	865-04152003-054-025	03042403-025	IH01D104	SWIPE	PB030424-G
0371329-026.001	865-04152003-054-026	03042403-026	IH01D104	SWIPE	PB030424-G
Z1329-027.001	865-04152003-054-027	03042403-027	IH01D104	SWIPE	PB030424-G
03Z1329-028.001	865-04152003-054-028	03042403-028	IH01D104	SWIPE	PB030424-G
≠03 2 €329-029.001	865-04152003-054-029	03042403-029	IH01D104	SWIPE	PB030424-G
03Z1329-030.001	865-04152003-054-030	03042403-030	IH01D104	SWIPE	PB030424-G
03Z1329-031.001	865-04152003-054-031	03042403-031	IH01D104	SWIPE	PB030424-G
03Z1329-032.001	865-04152003-054-032	03042403-032	IH01D104	SWIPE	PB030424-G
03Z1329-033.001	865-04152003-054-033	03042403-033	IH01D104	SWIPE	PB030424-G
03Z1329-034.001	865-04152003-054-035	03042403-034	IH01D104	SWIPE	PB030424-G
03Z1329-035.001	865-04152003-054-036	03042403-035	IH01D104	SWIPE	PB030424-G
03Z1329-036.001	865-04152003-054-037	03042403-036	IH01D104	SWIPE	PB030424-G
03Z1329-037.001	865-04152003-054-038	03042403-037	IH01D104	SWIPE	PB030424-G
03Z1329-038.001	865-04152003-054-038	03042403-038	IH01D104	SWIPE	PB030424-G
	1 22 3 112 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	05015105050	1110122101	21122	



Laboratory Report ID:

03042403

Laboratory Name:

Johns Manville IH Lab

Subcontract Number:

KH020005

RIN:

03Z1329 N. Richen

Requestor:
P.O./Charge Code:

EED50285

Bottle	Customer	Laboratory	Line Item	Sample	Instrument
Number(s)	Number(s)	ID Number(s)	Code	Matrix	Run
03Z1329-039.001	865-04152003-054-040	03042403-039	IH01D104	SWIPE	PB030424-G
03Z1329-040.001	865-04152003-054-041	03042403-040	IH01D104	SWIPE	PB030424-G
03Z1329-041.001	865-04152003-054-042	03042403-041	IH01D104	SWIPE	PB030424-G
03Z1329-042.001	865-04152003-054-043	03042403-042	IH01D104	SWIPE	PB030424-G
03Z1329-043.001	865-04152003-054-044	03042403-043	IH01D104	SWIPE	PB030424-G
03Z1329-044.001	865-04152003-054-045	03042403-044	IH01D104	SWIPE	PB030424-G
03Z1329-045.001	865-04152003-054-046	03042403-045	IH01D104	SWIPE	PB030424-G
03Z1329-046.001	865-04152003-054-047	03042403-046	IH01D104	SWIPE	PB030424-G
03Z1329-047.001	865-04152003-054-048	03042403-047	IH01D104	SWIPE	PB030424-G
03Z1329-048.001	865-04152003-054-049	03042403-048	IH01D104	SWIPE	PB030424-G
03Z1329-049.001	865-04152003-054-050	03042403-049	IH01D104	SWIPE	PB030424-G
03Z1329-050.001	865-04152003-054-051	03042403-050	IH01D104	SWIPE	PB030424-G
03Z1329-051.001	865-04152003-054-052	03042403-051	IH01D104	SWIPE	PB030424-G
03Z1329-052.001	865-04152003-054-053	03042403-052	IH01D104	SWIPE	PB030424-G
03Z1329-053.001	865-04152003-054-054	03042403-053	IH01D104	SWIPE	PB030424-G
03Z1329-054.001	865-04152003-054-055	03042403-054	IH01D104	SWIPE	PB030424-G
03Z1329-055.001	865-04152003-054-056	03042403-055	IH01D104	SWIPE	PB030424-G
03Z1329-056.001	865-04152003-054-057	03042403-056	IH01D104	SWIPE	PB030424-G
03Z1329-057.001	865-04152003-054-058	03042403-057	IH01D104	SWIPE	PB030424-G
03Z1329-058.001	865-04152003-054-059	03042403-058	IH01D104	SWIPE	PB030424-G
03Z1329-059.001	865-04152003-054-060	03042403-059	IH01D104	SWIPE	PB030424-G
03Z1329-060.001	865-04152003-054-061	03042403-060	IH01D104	SWIPE	PB030424-G
03Z1329-061.001	865-04152003-054-062	03042403-061	IH01D104	SWIPE	PB030424-G
03Z1329-062,001	865-04152003-054-063	03042403-062	IH01D104	SWIPE	PB030424-G
03Z1329-063.001	865-04152003-054-064	03042403-063	IH01D104	SWIPE	PB030424-G
0371329-064.001	865-04152003-054-065	03042403-064	IH01D104	SWIPE	PB030424-G
Z1329-065.001	865-04152003-054-066	03042403-065	IH01D104	SWIPE	PB030424-G
03Z1329-066.001	865-04152003-054-067	03042403-066	IH01D104	SWIPE	PB030424-G
.03ZF329-067.001	865-04152003-054-068	03042403-067	IH01D104	SWIPE	PB030424-G
03Z1329-068.001	865-04152003-054-069	03042403-068	IH01D104	SWIPE	PB030424-G
03Z1329-069.001	865-04152003-054-070	03042403-069	IH01D104	SWIPE	PB030424-G
03Z1329-070.001	865-04152003-054-071	03042403-070	IH01D104	SWIPE	PB030424-G
03Z1329-071.001	865-04152003-054-072	03042403-071	IH01D104	SWIPE	PB030424-G
03Z1329-072.001	865-04152003-054-073	03042403-072	IH01D104	SWIPE	PB030424-G
03Z1329-073.001	865-04152003-054-074	03042403-073	IH01D104	SWIPE	PB030424-G
03Z1329-074.001	865-04152003-054-075	03042403-074	IH01D104	SWIPE	PB030424-G
03Z1329-075.001	865-04152003-054-076	03042403-075	IH01D104	SWIPE	PB030424-G
03Z1329-076.001	865-04152003-054-077	03042403-076	IH01D104	SWIPE	PB030424-G



Laboratory Report ID:

03042403

Laboratory Name:

Johns Manville IH Lab

Subcontract Number:

KH020005

RIN:

03Z1329

Requestor:

N. Richen

P.O./Charge Code:

EED50285

Bottle	Customer	Laboratory	Line Item	Sample	Instrument
Number(s)	Number(s)	ID Number(s)	Code	Matrix	Run
03Z1329-077.001	865-04152003-054-078	03042403-077	IH01D104	SWIPE	PB030424-G
03Z1329-078.001	865-04152003-054-079	03042403-078	IH01D104	SWIPE	PB030424-G
03Z1329-079.001	865-04152003-054-080	03042403-079	IH01D104	SWIPE	PB030424-G
03Z1329-080.001	865-04152003-054-081	03042403-080	IH01D104	SWIPE	PB030424-G
03Z1329-081.001	865-04152003-054-082	03042403-081	IH01D104	SWIPE	PB030425-A
03Z1329-082.001	865-04152003-054-083	03042403-082	IH01D104	SWIPE	PB030425-A
03Z1329-083.001	865-04152003-054-084	03042403-083	IH01D104	SWIPE	PB030425-A
03Z1329-084.001	865-04152003-054-085	03042403-084	IH01D104	SWIPE	PB030425-A
03Z1329-085.001	865-04152003-054-086	03042403-085	IH01D104	SWIPE	PB030425-A
03Z1329-086.001	865-04152003-054-087	03042403-086	IH01D104	SWIPE	PB030425-A
03Z1329-087.001	865-04152003-054-088	03042403-087	IH01D104	SWIPE	PB030425-A
03Z1329-088.001	865-04152003-054-089	03042403-088	IH01D104	SWIPE	PB030425-A
03Z1329-089.001	865-04152003-054-090	03042403-089	IH01D104	SWIPE	PB030425-A
03Z1329-090.001	865-04152003-054-091	03042403-090	IH01D104	SWIPE	PB030425-A
03Z1329-091.001	865-04152003-054-092	03042403-091	IH01D104	SWIPE	PB030425-A
03Z1329-092.001	865-04152003-054-093	03042403-092	IH01D104	SWIPE	PB030425-A
03Z1329-093.001	865-04152003-054-094	03042403-093	IH01D104	SWIPE	PB030425-A
03Z1329-094.001	865-04152003-054-095	03042403-094	IH01D104	SWIPE	PB030425-A
03Z1329-095.001	865-04152003-054-096	03042403-095	IH01D104	SWIPE	PB030425-A
03Z1329-096.001	865-04152003-054-097	03042403-096	IH01D104	SWIPE	PB030425-A
03Z1329-097.001	865-04152003-054-098	03042403-097	IH01D104	SWIPE	PB030425-A
03Z1329-098.001	865-04152003-054-099	03042403-098	IH01D104	SWIPE	PB030425-A
03Z1329-099.001	865-04152003-054-100	03042403-099	IH01D104	SWIPE	PB030425-A
03Z1329-100.001	865-04152003-054-101	03042403-100	IH01D104	SWIPE	PB030425-A
03Z1329-101.001	865-04152003-054-102	03042403-101	IH01D104	SWIPE	PB030425-A
0371329-102.001	865-04152003-054-103	03042403-102	IH01D104	SWIPE	PB030425-A
Z1329-103.001	865-04152003-054-104	03042403-103	IH01D104	SWIPE	PB030425-A
03Z1329-104.001	865-04152003-054-105	03042403-104	IH01D104	SWIPE	PB030425-A
03Z1929-105.001	865-04152003-054-106	03042403-105	IH01D104	SWIPE	PB030425-A
03Z1329-106.001	865-04152003-054-107	03042403-106	IH01D104	SWIPE	PB030425-A
03Z1329-107.001	865-04152003-054-108	03042403-107	IH01D104	SWIPE	PB030425-A
03Z1329-108.001	865-04152003-054-109	03042403-108	IH01D104	SWIPE	PB030425-A
03Z1329-109.001	865-04152003-054-110	03042403-109	IH01D104	SWIPE	PB030425-A
03Z1329-110.001	865-04152003-054-112	03042403-110	IH01D104	SWIPE	PB030425-A
03Z1329-111.001	865-04152003-054-113	03042403-111	IH01D104	SWIPE	PB030425-A
03Z1329-112.001	865-04152003-054-114	03042403-112	IH01D104	SWIPE	PB030425-A
03Z1329-113.001	865-04152003-054-115	03042403-113	IH01D104	SWIPE	PB030425-A
03Z1329-114.001	865-04152003-054-116	03042403-114	IH01D104	SWIPE	PB030425-A



Laboratory Report ID:

03042403

Laboratory Name:

Johns Manville IH Lab

Subcontract Number:

KH020005

RIN:

03Z1329

Requestor:

N. Richen

P.O./Charge Code:

EED50285

					The second secon
Bottle	Customer	Laboratory	Line Item	Sample	Instrument
Number(s)	Number(s)	ID Number(s)	Code	Matrix	Run
03Z1329-115.001	865-04152003-054-117	03042403-115	IH01D104	SWIPE	PB030425-A
03Z1329-116.001	865-04152003-054-118	03042403-116	IH01D104	SWIPE	PB030425-A
03Z1329-117.001	865-04152003-054-119	03042403-117	IH01D104	SWIPE	PB030425-A

ROCKY FL. SERVICES	ROCKY FLATS CLOSURE SITE SERVICES RFETS	TE	CHAIN	CHAIN OF CUSTODY/SA	MPLE AN	CODY/SAMPLE ANALYSIS REQUEST	3043403	COC: 03Z1329#00	9#001	Page 1 of 9
Sampler(s)			(time/date) Con	Contact/Requester SCAGGIARI, SHERRY** RICHENM	RY**RICHE!	Dut: 4/25	A3 Telephone No. 2155/212-3176	ta. 2-3176		
RIN 03Z1329			Sen	Sempling Origin				Purchase Order/Charge Code EED50285		
Project Title B865 BE WIPES	IPES		Log	Logbook No.			Ice Chest No.	é	Temp.	
To (Lab) Johns Manyille	ville		We	Method of Shipment			Bill of Ladi	Bill of Lading/Air Bill No.		
Protocol			Rel	Related COC (if any)			PRE			·
POSSIBLE SAN	POSSIBLE SAMPLE HAZARDS/REMARKS	LARKS	(SCREENING	NING SPECIAL INSTRUCTIONS	UCTIONS Hold Time	Time		
Are acid preserved: Are other known ha	Are sold preserved samples DOT bazardous per 40 CFR Part 136.3 Table III. Are other known hazardous substances present? YES (10)	YES (A)	Table III vers (100		REQUIRED	RED				
		/ W 1/23/03	Y S				-			K
Bottle No.	Customer	Matrix	Detta/Time	Location	Container (size/type)	[Fleid-Filts	Sample red] LIC (Method	Sample Analysis [Field-Filtered] LIC (Method Title) [TAT]/[Parameter List)	lat	Preservative; Packing
0321329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INGIDIO4 (OSEA 12 (BERYLLUM)	S/ICP-AES B	(OSHA 125/ICP-ARS Be Filters Swipe (1	(Wh) [24hr8]	NA NA NA
03Z1329 -002.001	865-04152003	SURFACE		Room(s): HIGH BAY	HIGH 1-SAMPL	2	125/ICP-AES Be	Filters Swipe	(Wh) [24hr8]	NA;
03Z1329	865-04152003 - © 54-003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INGIDIOS (OSEN 12 (BERYLLIUM)	125/ICP-AES Be	Filters Swipe	(Ma) [24hr8]	¥¥ ŽŽ
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSEA 12 (BERYLLIUM)	125/ICP-AES Be	Filters Swipe	(Wh) [24hxs]	NA; NA;
03Z1329 -005.001	865-04152003 - 054-005	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSEN 12 (BERYLLIUM)	125/ICP-AES Be	Filters Swipe	(Wh) [24hrs]	N/A; N/A
03Z1329 -006.001	865-04152003 - 054-006	SURFACE	٠	Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 12 (BERYLLIUM)	125/ICP-AES Be	Filters Swips	(Wh) [24hr#]	N/A; N/A
03Z13Z9 -007.001	865-04152003 - Q54-007	SURFACE		Room(s): HIGH BAY		INOIDIO4 (OSHA 12 (BERYLLIUM)	125/ICP-AES B	Be Filters Swipe ((Mh) [24hrs]	NA; NA
03Z1329 -008.001	865-04152003 - 054-008	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IROIDIO4 (OSBA 12 (BERYLLIUM)	125/ICP-AES Be	Filters Swipe	(Wh) [24hr8]	N/A; N/A
03Z1329 -009.001	865-04152003 - 054-009	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 12 (BERYLLIUM)	125/ICP-AES Be	Filters Swipe	(wh) [24hrs]	NA:
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ROCKY FL. SERVICES	ROCKY FLATS CLOSURE SITE SERVICES RFETS	37.	CHAIN OF CUST		MPLE AN	COC: 03Z1329#00 COC: 03Z1329#00	101 Page 2 of 9	2 of 9
RIN 03Z1329		高	123 6 Cont	Contact/Requester SCAGGIARI, SHERRY" HICHENM	AY***RICHE			
Bottle No.	Customer	e Maurix	Date/Tim	Location	Container (size/type)	Field-Filtered] LIC	Prese	Preservative; Packing
03Z1329	865-04152003	SURFACE			1-SAMPL E	INGIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh) {BERYILIUM}	(Wb) [24brs] N/A;	
03Z13Z9	865-04152003 - 9 54-011	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IROIDIO4 (OSEA 125/ICP-AES Be Filters Swipe (Wh)	(wh) [24hrs] N/A;	
03Z1329 -012.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) (BERYLLUM)	(Wb) [24hrs] N/A;	
03Z1329 -013.001	865-04152003 - Q 54-013	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDI04 (OSHA 125/ICP-AES Be Filters Swipe (Wh) {BERYLLUM}	(Wb) [24brs] N/A; N/A	
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) {BERYLLUM}	(Wh) [24hrs] N/A;	
03Z1329 -015.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) {BERYLLUM}	(Wb) [24br8] N/A;	
03Z1329 -016.001	865-04152003	SURFACE		Room(s): HIGH BAY	HIGH 1-SAMPL E	IROIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) {BERYLLIUM}	(Wb) [24brs] N/A;	
03Z1329 -017.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INGIDIO4 (OSHA 125/ICP-AKS Be Filters Swipe (Wh) {BERYILIUM}	(Wh) [24hr8] N/A;	
03Z1329 -018.001	865-04152003 0 54-018	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) (BERYLLUM)	(Wh) [24hrs] N/A;	
03Z1329 -019.001	865-04152003 054-019	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INGIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) {BERYLLIUM}	(Wb) [24brs] N/A;	
03Z1329 -020.001	865-04152003 - © 54-020	SURFACE		Room(s):	1-SAMPL E	INDIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) {BERYLLUM}	(Wb) [24brs] N/A; N/A	
03Z1329 -021.001	865-04152003 0 54-021	SURFACE		Room(s): HIGH BAY	HIGH 1-SAMPL E	IHOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) (BERYLLIUM)	(Wh) [24hrs] N/A;	
03Z1329	865-04152003 - 054-022	SURFACE		s): HIGH 3AY	1-SAMPL E	IROIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) (BERYILIUM)	(wh) [24hr8] N/A;	
03Z1329 -023.001	865-04152003 - 6 -54-023	SURFACE		Room(s): HIGH BAY	HIGH 1-SAMPL E	IHOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) {BERYLLUM}	(Wb) [24brs] N/A;	
03Z1329 -024.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IHOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh (BERYLLUM)	(Wh) [24hrs] N/A;	
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Page 7 of 22

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Bottle No.	Oustonner Number	e Matrix	Date/Time	Location	Container (stze/type)	Sample Analysis [Field-Fittered] LIC (Method Title) [TAT]/(Parameter List)	Preservative; Packing
03Z1329 -025.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSEA 125/ICP-AES Be Filters Swipe (Wh)[24hrS] (BERYLLUM)	Z Z Z Z
03Z1329 -026.001	865-04152003 054-026	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLUM)	ž Š Š
03Z1329 -027.001	865-04152003 - 0 54-027	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] [BERYLLUM]	žž ŽŽ
03Z1329 -028.001	865-04152003 0-54-028	SURFACE		Room(s):	1-SAMPL E	IROIDIO4 (OSEA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] (BERYLLUM)	N. N. A.
03Z1329 -029.001	865-04152003 - 054-029	SURFACE		Roam(s):	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] (BERYLLUM)	NA.
03Z1329 -030.001	865-04152003 - 6 54-030	SURFACE		Room(s):	1-SAMPL E	INCIDICA (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] (BERYLLUM)	N.A.
03Z1329 -031.001	965-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh) [24hrs] (BERYLLUM)	NA;
03Z1329 -032.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hzs] {BERYLLUM}	NA NA
03Z1329 -033.001	865-04152003 - Q 54-033	SURFACE		Room(s): HIGH BAY	1-SAMPL. E	INCIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh) [24hrs] (BERYLLUM)	NA.
03Z1329 -034.001	865-04152003 ~ \$54-035	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLUM)	K K K K
03Z1329 -035.001	865-04152003 - © 54-036	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDICA (OSEA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] {BERYLLUM}	K K K K K K
03Z1329 -036.001	865-04152003 054-037	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hzs] (BERYLLUM)	ž Š Š
03Z1329 -037.001	865-04152003 ~Q54-038	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDICA (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] (BERYLLUM)	Z A Z
03Z1329 -038.001	865-04152003 - 054-039	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INGIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLUM)	Z Z Z Z
03Z1329 -039.001	865-04152003 - © 54-040	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] {BERYLLIUM}	NA:
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SERVICES	ROCKY FLATS CLOSURE SITE SERVICES RFETS	- - 7	CHAIN OF CUST	F CUSTODY/SA	MPLE AN	ODY/SAMPLE ANALYSIS REQUEST 0321329#001 0321329#001	0#00	200 4 00 00 00 00 00 00 00 00 00 00 00 00
RIN 0371329		き	23 3 Conta	Contact/Requestor SCAGGIARI, SHERRY**RICHENM	RYTHRICHE			
Bottle No.	Customer	Manrix	Date/Time	Location	Container (sizeAype)	Semple Analysis [Field-Filtered] LIC (Method Title) [TATJ/(Parameter List)	숲	Preservative; Packing
03Z1329	865-04152003 - 6 54-041	SURFACE		Room(s): HIGH BAY		INGIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (W {BERYLLUM}	(Wh) [24hr8]	NA; NA
03Z1329	865-04152003 - 954-042	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDANG (OSHA 125/ICP-ARS Be Filters Swipe (W {BERYLLUM})	(wh) [24hrs]	NA:
03Z13Z9	865-04152003 ~ \$54-043	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INGIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (W {BERYLLUM}	(wh) [24hrs]	ZZ ZZ ZZ ZZ ZZ ZZ ZZ ZZ ZZ ZZ ZZ ZZ ZZ
03Z1329	865-04152003 - 054-044	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IHOIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (W {BERYLLUM}	(Wb) [24hrs]	N/A;
03Z13Z9	865-04152003 - 054-045	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INDIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (W {BERYLLIUM}	(Wh) [24hrB]	N'A; N'A
03Z1329 -045.001	865-04152003 - 054-046	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INDIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (W (BERYLIUM)	(Wb) [24hrs]	N/A; N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	HIGH 1-SAMPL E	INDIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (W (BERYLLUM)	(wh) [24hrs]	NA; NA
0321329	865-04152003	SURFACE		Ē	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (W {BERYLLUM})	(Mh) [24hr8]	N/A;
03Z13Z9 -048.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (W {BERYLLUM}	(Wh) [24hrs]	N/A; N/A
03Z1329	965-04152003 - 054-050	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (M {BERYLLUM}	(Mh) [24hrs]	NA; NA
03Z1329	865-04152003 - 0 54-051	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (W (BERYLLIUM)	(Mb) [24brs]	N'A N'A
03Z1329	865-04152003 - 0 54-052	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IHOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (W {BERYLLUM}	(wa) [24brs]	NA.
03Z1329	865-04152003 - Q 54-053	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (W	(Wb) [24hr8]	N/A;
0321329	865-04152003 ~ 0 54-054	SURFACE	le I	Room(s); HIGH BAY	HIGH 1-SAMPL	INOIDIGE (OSHA 125/ICP-AES Be Filters Swipe (W (BERYLLUM))	(Wh) [24hr8]	N/A;
03Z1329 -054.001	865-04152003 - © 54-055	SURFACE		Room(s): HIGH BAY	I 1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (FERYLIUM)	(Mh) [24hrs]	N/A; N/A
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15	SERVICES	ROCKY FLATS CLOSURE SITE SERVICES RFETS	ITTE	CHAIN OF CUS	F CUSTODY/SA	MPLE AN	TODYSAMPLE ANALYSIS REQUEST 03042403	Page 5 of 9
	RIN 03Z1329		/W/ 18969		Confact/Requester SCAGGIARI, SHER	Bester ARI, SHERRY**RICHENM	Telephone No. 2155/212-3176	
•	Bottle No.	Customer	Maurix	Datte/Time	Location	Container (size/lype)	Sample Analysis [Field-Filtered] LIC (Method Title) [TATJ/(Parameter List)	Preservative; Packing
	03Z1329 -055.001	865-04152003 - 0 54-056	SURFACE	A.A.	Room(s): HIGH BAY	1 <u> </u>) [24br8]	NA NA NA
	03Z13Z9 -056.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDID4 (OSEA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLUM)	NA:
	03Z1329 -057.001	865-04152003 ~ Q 54-058	SURFACE		Room(s):	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh)[24hrS] {BERYLLUM}	N.A.
•	03Z1329 -058.001	865-04152003	SURFACE		Room(s):	1-SAMPL E	INCIDIO4 (OSEA 125/ICP-AES Be Filters Swipe (Wh)[24hrS] (BERYLLUM)	N/A; N/A
	03Z1329 -059.001	865-04152003 - 0 54-060	SURFACE		Room(s):	1-SAMPL E	INDIDIO4 (OSHA 125/ICP-AES De Filters Swipe (Wh)[24hrs] (BERYLLUM)	WA: NA
•	03Z1329 -060.001	865-04152003 - 0 -54-061	SURFACE		Ē	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hr8] [BERYLLUM]	NA; NA
	03Z1329 -061.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hr8] [BERYLLUM]	NA; NA
	03Z1329 -062.001	865-04152003 - © 54-063	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh)[24hrs] (BERYLLUM)	KA KA KA
	03Z1329 -063.001	865-04152003	SURFACE		Room(s): HiGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLUM)	ŽŽŽ
	03Z1329 -064.001	865-04152003 054-065	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh)[24hr8] [BERYLLUM]	N/A; N/A
	03Z1329 -065.001	865-04152003 - 054- 066	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INDIDIO4 (OSEA 125/ICP-AES Be Filters Swipe (Wh)[24hr8] [BERYLLUM]	ŽŽ ŽŽ
	03Z1329 -066.001	865-04152003 -054-067	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-ARS Be Filter# Swipe (Wh)[24hrS] {BERYLLUM}	Z Z Z
	03Z1329 -067.001	865-04152003 - 054-068	SURFACE	1	Room(s): HIGH BAY	1-SAMPL E	INGIDIO4 (OSBA 125/ICP-ARS Be Filters Swipe (Wh)[24hrs] (BERYLLUM)	N/A; N/A
	03Z1329 -068.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IROIDIO4 (OSBA 125/ICP-AES Be Filters Swipe (Wh)[24hr8] [BERYLLIUM]	NA: NA:
	03 Z1329 -069.0q1	865-04152003 -054-070	SURFACE		Room(s):	1-SAMPL	IHOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] {BERYIJUM}	NA: NA
	Refined By	No. 4-23-03	03/1515 Rg	Modern Pr.	ysalis	Date/Time 1	May 84. 1950 Descrime Repring 1 1550	Date/Tim 1915
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NA;	(Wh) [24hr8]	Be Filters Swipe	125/ICP-AES Be F.		(BERYLLIUM)	E 1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003 - \$64-085	4.001
NA;	(Wh) [24hrs]	Filters Swipe	125/ICP-AES Be F	2	(BERYLLIUM)	1-SAMPL	를		SURFACE	865-04152003 - 0 54-084	ğ
NA;	(Wh) [24hrs]	Filters Swipe	125/ICP-AES Be F		INOIDIO4 (OSH [BERYLLIUM]	1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003 0-54-083	03Z1329 -082_001
N/A; N/A	(Wh) [24hr8]	Filters Swipe	125/ICP-AES Be F	F	IHOIDIO4 (OSH (BERYLLIUM)	E 1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003 ~954-082	3
N/A; N/A	(Wh) [24hrs]	Be Filters Swipe	125/ICP-AES Be F	YHB	INOIDIO4 (OSH (BERYLLIUM)	1-SAMPL E	Room(s): HIGH BAY		SURFACE	865-04152003 - 054-081	03Z1329 -080.001
N/A;	(Wh) [24hrs]	Filters Swipe	125/ICP-AES Be F	N.H.S	IRO1D104 (OSH {BERYLLIUM}	1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003 - 054-080	03 Z1329 -0 79.001
N/A; N/A	(Wh) [24hrs]	Filters Swipe	125/ICP-AES Be F	250	IHOIDIO4 (OSH {BERYLLIUM}	HIGH 1-SAMPL E	Room(s): HIGH BAY		SURFACE	865-04152003 - Q54-079	03Z1329 -078.001
N/A; N/A	(Wh) [24hrs]	Filters Swipe	125/ICP-AES Be F:	. >	IHO1D104 (OSH {BERYLLIUM}	1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003 - 054-078	03Z1329
N/A;	(Wh)[24hrs]	Filters Swipe	125/ICP-AES Be F	ZH2	INOIDIO4 (OSE (BERYLLIUM)	1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003 -054-077	03 Z 13 29 -076.001
NA.	(Mh) [24hrs]	Filters Swipe	125/ICP-AES Be F	SE SE	IROIDIO4 (OSB (BERYLLIUM)	1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003	03 Z 1329 -075.001
NA;	(Wh) [24hrs]	Filters Swipe	125/ICP-AES Be F	V ARS	INOIDIO4 (OSH	1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003 ~ 0 54-075	03Z1329 -074.001
NA.	(Wh)[24hrs]	Be Filters Swipe	125/ICP-AES Be F	XH3	INOIDIO4 (OSE (BERYLLIUM)	1-SAMPL E	Room(s): HIGH BAY		SURFACE	865-04152003 - 9 54-074	03 Z1329 -073.001
NA;	(Wh) [24hrs]	Filters Swipe	125/ICP-AES Be F	ZH	IHOIDIO4 (OSH (BERYLLIUM)	1-SAMPL	Room(s): HIGH BAY	·	SURFACE	865-04152003 054-073	03Z1329 -072.001
NA,	(Wh) [24hrs]	Filters Swipe	125/ICP-AES Be F	SHS	INOIDIO4 (OSE (BERYLLIUM)	1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003 - 0 54-072	03 Z1329 -071.001
N/A;) [24bx8]	Filters Swipe	CP-AES Be F	(05HA 125/ICP-AES Be M)	(BERYLLIUM)	E 1-SAMPL	Room(s): HIGH BAY		SURFACE	865-04152003 -0-54-071	03Z13 29 -070.001
Preservative; Packing	List)	Sample Analysis [Field-Filtered] LIC (Method Title) [TAT)/[Parameter List)	Sample Analysis LIC (Method Title) [TA	lekd-Filtered) i	7	Container (size/type)	Location	Date/Time	Matrix	Customer Number	Bottle No.
		176	Telephone No. 2155/212-3176		ENE	SHERRY"RICHENN	Contact/Requester SCAGGIARI, SHER		W 1003		03 Z 1329
* 124	032 323#001		0.3042403		VALYSIS REQ	MPLE A	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	CHAIN OI	2	RFETS	SERVICES
Page 6 of 9	4	COC: 02742	8						TE -	ROCKY FLATS CLOSURE SITE	ROCKY FLA

CHAIN OF CORNYON/SAMPLE AVALYSIS REQUEST Common Com												
CHAIN OF CLSYTOPYSAMPLE ANALYSIS REQUEST Content C	Date/Tim			Date/Tim	•	Englished By:			Received By:	Date/Time		Relinquithed By:
Contain Cont			Recognition By	50:17	Masic	Supplied By:	a coa	4. 10	Regarded By:	>/ Desertime	4-14-0	Supplied By
Control Cont		1/23/02	e Received By:	Dutestim 1515	Calcal	MANUT.	Date/Time Re	Yashos .	Regard By:		J- 4-730	Retinguished By
REPUTS CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST Chain Ch	2					(BERYLLIUM)	ı				-054-100/	-099.001
CHARTO OF CLOSTODY/SAMPLE ANALYSIS REQUEST:	NA:	(Wh) [24hrs]	Swipe	8		HOIDIOM (OSHI	-			SURFACE	865-04152003	
CHAIN OF CLUSTODY/SAMPLE ANALYSIS REQUISES Content Cluster Content	NA A					(BERYLLIUM)	ग		-		- 954-099	3
Cameric Came	N.A.	(Wh) [24brs]	Swipe	*		HISO) POICEOR	_	FOT		SURFACE	865-04152003	
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST Companies	N/A					(BERYLLIUM)					-054-098	-097.001
CHAIN OF CLYSTODY/SAMPLE ANALYSIS REQUEST	¥,	(Wh) [24hrs]	Swipe	8		HEOD POTOTOR		HIGH		SURFACE	865-04152003	
Castories Chain Of CUSTODY/SAMPLE ANALYSIS REQUEST Castories	Š					{BERYLLIUM}	m				-054-097	3
CHAIN OF CUSTODYSAMPLE ANALYSIS REQUEST	N.	(Wh)[24hr8]		8		HESO) POTCION	1			SURFACE	865-04152003	
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST Trickedor Na.	N/A					(BERYLLIUM)		_			-054-096	<u>इ</u>
Centariff Contact Co	N,	(Wh)[24hrs]	Bwipe	8	- Ł	HEO) POICEOR		H F		SURFACE	865-04152003	
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST Costor Costo	××.	(Wh)[24hr8]	Swipe				1-SAMPL	돌		SURFACE	865-04152003 -054-095	
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST Data Data Data Data Data Data Data Dat	NA	(wh) [zenzy]	Parthe	. 3	1	(BERYLLIUM)	E -SAMP'C	E		SUHFACE	954-094	ਤ
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST October (**			·	1	(BERYLLIUM)	-				-954-093	3
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST OCHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST. OCHAIN OF COSTANT OF CUSTODY/SAMPLE ANALYSIS REQUEST. OCHAIN OF CUSTODY/SAMPLE ANALYSIS RECUSTOR OCHAIN OF CUSTODY/SAMPLE ANALYSIS RECUSTO	NA;	(Wh)[24hr8]	ad be	7	ı	6		된		SURFACE	865-04152003	
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST Content Co	N/A	(Wh) [24brs]	Swipe	7		HOLDIO4 (OSHI		HOH		SURFACE	865-04152003 -054-092	ğ
Customer Number Data/Time Location (size/type) 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs] 865-04152003 SURFACE Room(s): HIGH 1-SAMPL INDID104 (OSEA 125/ICP-ALS Be Filters Swipe (Wh)[24hrs]	N N	(Mh) [24hrs]	Swipe			HOLDIO4 (OSH)		표양		SURFACE	865-04152003 - 954-091	ਤੁ
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST Contact/Requester	NA				1	(BERYLLIUM)	┼	'			- 954 -090	3
CCustomer CCustomer CCustomer CCustomer Contact/Requester CCustomer CCustomer Customer Container Costact/Requester Container Container Container Container Customer Costact/Requester Container Container Container Container Container Container Container Costact/Requester Container Container Container Container Container Container Container Container Costact/Requester Costact	N/A;	(Mh) [24hz8]	Byipe			000	_			SURFACE	865-04152003	
ES REETS CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (2) (13/1/3) (2) (13/1/4) (2) (N/A;	(Wh) [24hr8]	Swipe	8		HOIDIOG (OSEJ (BÉRYLLIUM)		HIGH		SURFACE	865-04152003 - 954-089	ğ
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 1304/943 Customer Customer Matrix Date/Time Contact/Requester SCAGGIARI. SHERRY"*RICHENM Container Location (size/type) B65-04152003 SURFACE Room(s): HIGH 1-SAMPL BAY E Room(s): HIGH 1-SAMPL BAY E BERYLLIUM;	N N	(Wh) [24hrs]	Swipe				н	프		SURFACE	865-04152003 054- 088	3
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST ORDER OF CONTROL OF SCAGGIARL SHERRY"RICHENM Customer ORDER OF CUSTODY/SAMPLENM Contactor SCAGGIARL SHERRY"RICHENM Container Container Container Sample Arabysis Semple A	N N	(Wh) [24hr8]	Swipe	8		EBERYLLIUM)		된		SURFACE	865-04152003 	ğ
REFETS CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 13 1/2/13 Telephone No. Customer Number Matrix Date/Time Chain of Customer (size/type) Customer (size/type) [Field-Filtered] LIC (Method Title) [TATJ/(Parameter List)	N.X.		1	S De Fil	125/ICP-AE	15	Н	Her		SURFACE	865-04152003 - 854-086	3
RPETS CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 03042403 Telephone No. 2155/212-3176	Preservative		TAT/(Parameter L	mple Analysimod Title) [Sa -Filtered] LIC (Me	F	1]		9 Matrix	Customer Number	Bottle No.
RPETS CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST 23042403			9	10the No. 15/212-317	Teleph 215		Y"RICHEN	AGGIARI, SHERF		多		RIN 03Z1329
					304	LYSIS REQUE	WPLE ANA	F CUSTODY/SAL	CHAIN 0	1	RFETS	

Page 12 of 22

ROCKY FLA SERVICES	ROCKY FLATS CLOSURE SITE SERVICES RFETS	TE	CHAIN OF	CUSTODY/SA	MPLE AN	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		03Z1329#001		Page 8 of 9
RIN 03Z1329		My 41 03	Ω	Contact/Requester SCAGGIARI, SHERRY**RICHENM	RY**RICHE		Telephone No. 2155/212-3176			:
Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	[Field-Filtered]	Sample Analysis (Method Title) [TAT]/	Parameter Li	st)	Preservative; Packing
03Z1329 -100.001	865-04152003 \	SURFACE	- 6-1	Room(s): HIGH BAY		IHOID104 (OSHA 125/ICP-AES	Be Filters	Swipe ())[24hrS]	N/A;
03Z1329	865-04152003 -054-102	SURFACE		Room(s): HIGH BAY	1-SAMPL	HA 125/ICP-AES	Be Filters	Swipe	(Wh)[24hr8]	WA; N/A
03 Z 13 29 -102.001	865-04152003 ~ Q 54-103	SURFACE		Room(s): HIGH BAY	HIGH 1-SAMPL	SEA 125/ICP-AES	Be Filters	Swipe	(Wh) [24brs]	N/A;
03Z1329 -103.001	865-04152003 054-104	SURFACE		Room(s): HIGH BAY	1-SAMPL	IHOID104 (OSHA 125/ICP-AIS (BERYLLIUM)	De Filters	Swipe	(Mh) [24hx8]	NA.
03Z1329 -104.001	865-04152003 / -054-105 /	SURFACE		Room(s): HIGH BAY	1-SAMPL	INOID104 (OSHA 125/ICP-AES (BERYLLIUM)	Be Filters	edias	(Mh) [24hrs]	NA A A
03Z1329 -105.001	865-04152003 054-106	SURFACE		Room(s): HIGH BAY	1-SAMPL	IHOIDIO4 (OSHA 125/ICP-AES (BERYLLIUM)	Be Filters	Swipe	(Wh) [24hrs]	N/A;
03Z1329 -106.001	865-04152003 - 6 54-107	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IHOIDIO4 (OSEA 125/ICP-AES Be {BERYLLIUM}	Be Filters	Swipe	(Wh) [24hrs]	N/A;
03Z1329 -107.001	865-04152003 -054-108	SURFACE	-	Room(s): HIGH BAY	1-SAMPL E	INOID104 (OSHA 125/ICP-AES (BERYLLIUM)	Be Filters	Swipe	(Wh) [24hrs]	NA;
03Z1329 -108.001	865-04152003 ~054-109	SURFACE		Room(s): HIGH BAY	1-SAMPL	INOID104 (OSHA 125/ICP-AMS (BERYLLIUM)	Be Filters	Swipe	(Wh) [24hrs]	N/A;
03Z1329 -109.001	865-04152003 ~ Q 54-110	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOID104 (OSHA 125/ICP-AES (BERYLLIUM)	Be Filters	Swipe	(Wh) [24hrs]	N/A;
03Z1329 -110.001	865-04152003 -\054-112	SURFACE		Room(s): HIGH BAY	1-SAMPL	INOIDIO4 (OSHA 125/ICP-ANS (BERYLLIUM)	Be Filters	Swipe	(Wh)[24hr8]	N/A; N/A
03Z1329	865-04152003 054-113	SURFACE		Room(s): HIGH BAY	E-SAMPL	IHOID104 (OSHA 125/IC9-AMS [BERYLLIUM]	Be Filters	Swipe	(Wh) [24brs]	N/A;
03Z1329 -112.001	865-04152003 - 054-114	SURFACE		Room(s): HIGH BAY	1-SAMPL	IHOID104 (OSHA 125/ICP-AES [BERYLLIUM]	De Filters	Swipe	(Wh) [24hrs]	N/A;
03Z1329 -113.001	865-04152003 ~ \$ 54-115	SURFACE		Room(s): HIGH BAY	1-SAMPL	INOID104 (OSEA 125/ICP-AES (BERYLLIUM)	Be Filters	Swipe	(Wh) [24hrs]	NA.
03Z1329 -114.001	865-04152003 -6-54-116	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOID104 (OSBA 125/ICP-AES (BERYLLIUM)	Be Filters	Swipe	(Wh) [24hrs]	NA.
Reillinghiated 87:	1022-H ~	Date/Time Ro	1	aperty	Date/Time	Reingrijshed By:	Date/Time Rose	The same	4/63/63	Date/Time
Folgh.	14-24-00	Danelline R	Sand M. C.	1 × 1	Sept 1	resinguisses By Mc Older, 4	105 X	CARANA SANA	SUMALL	Date/Time
Relinquisted By:		Dute/Time B	dedwed By:		Dete/Time/	Relinguished By:	Date/Time Received	ived By:		Date/Time
FINAL SAMPLE		eturned to customer	Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)	ure, used in analytical p	rocess)	Disposed By	Date/Time	COC printed:	Date/Time COC printed: 04/22/03 13:22 (Version:coc_220.pp)	on:coc_r20.rpt)

NARRATIVE

The laboratory did not encounter any problems or questions associated with the receipt of samples into the laboratory. All samples identified on the Chain-of-Custody (COC) form were received and accepted in good condition with tamper-resistant seals intact.

Whatman 4 or Whatman 41 swipe samples were submitted in this project and analyzed for the identification and quantitation of beryllium in accordance with Line Item Code (LIC), IH01D104. The methodology does not define any required specific holding times for the compound on the sampling media. Results of the sample analyses were generated and reported by the specified turn-around time (TAT).

The laboratory preparation of samples in this project was performed following laboratory Standard Operating Procedure (SOP), IH M-1.02, Revision N. Additional references to the preparation technique of this sample type are addressed in EPA Method, 3015A and CEM Application Procedure, MS-9. The samples were prepared using the CEM Microwave Sample Preparation System, Model MDS 2000. The instrumental sample analysis for these samples follows SOP, IH M-1.04, Revision N, which covers the analytical procedure outlined in OSHA method, ID-125G. Start-up and calibration of the Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) instrument are performed following manufacturer's instructions and are addressed in SOP, IH M-1.03, Revision N.

Results of all calibration verifications (initial and continuing), method blanks (calibration and matrix), Laboratory Control Samples (LCSs), Laboratory Control Sample Duplicates (LCDs) and internal QA/QC program monitoring standards for this analytical batch are within acceptable limits as specified in Statement of Work (SOW) module, IH01-D.3.

The internal quality control procedures for statistical monitoring of analytical data to ensure the production of quality results with continuing high validity are addressed in the JMTC IH Laboratory Quality Assurance Manual, Section 10.0. Results of all method-specific QC assessments for this analytical batch are within acceptable limits in accordance with SOW module, IH01-D.3.

The Instrument Detection Limit (IDL) has been determined to be 0.00028 µg/ml using the ICP-AES instrument, Perkin Elmer - Optima model 3000DV. Method Detection Limit (MDL) determinations are performed in accordance with the EPA Method contained in 40 CFR Part 136, Appendix B. The MDL for beryllium on the Whatman swipe matrix by ICP-AES has been determined to be 0.012 µg/swipe. These values meet the required detection limits for SOW module, IH01-D.3. The sample batch did not require any sample re-analyses due to dilutions or any anomalies. The qualifiers used for the results page are "U" for non-detect and "J" for levels greater than the MDL, but less than the Reporting Limit.

The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate N. 056) and continues to rate proficient within the Proficiency Analytical Testing (PAT) program. This program is designed for laboratories involved in analyzing samples taken in the workplace environment. The JMTC IH Analytical Laboratory is also accredited in the Environmental Lead Laboratory Accreditation Program (ELLAP), which is recognized by the EPA National Lead Laboratory Accreditation Program (NLLAP). This program accredits and monitors performance of laboratories testing for lead in environmental samples such as paint, soil, dust wipes and air.

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QUICK RESULTS SUMMARY

Laboratory Report ID 03042403

Laboratory Name: Johns Manville IH Lab Subcontract Number: KH020005

03Z1329

N. Richen EED50285 RIN: Requestor: P.O./Charge Code:

	Air	Concentration																									
;	Air Vol or C	A THINK									4	3										77.0	+				
	Total	1	1	+	+	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ 0.1 mg	+		+	1	/0.1 µg 0	\dagger	†	1	< 0.1 µg U	< 0.1 µg U	< 0.1 µg U	<0.1 µg U	T		T	100		V 0.1 µg	\dagger	< 0.1 µg U
CONCENTE A THOM	Front Section	TOTAL SECTION																									
	Back Section	┢																The state of the s									
Reporting	Limit	0.1 ug	0.1 με	0.1 ug	0.1 110	0.1 ug	0.1 ug	0.1 με	0.1 με	0.1 ug	0.1 ug	0.1 με	0.1 με	0.1.10	0.1.0	0.1 µg	0.1 µg	0.1 µg	0.1 μg	0.1 μg	0.1 µg	0.1 µg	0.1 μg	0.1.10	01.10	01.10	0.1 ug
Requested	Analysis	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Del ymmi	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Beryllium	Bervllium	Bervllium	Beryllium	Beryllium
Laboratory	ID Number	03042403-001	03042403-002	03042403-003	03042403-004	03042403-005	03042403-006	03042403-007	03042403-008	03042403-009	03042403-010	03042403-011	03042403-012	03042403-013	03042403-014	210 2070700	03042403-015	03042403-016	03042403-017	03042403-018	03042403-019	03042403-020	03042403-021	03042403-022	03042403-023	03042403-024	03042403-025
Customer	Number	865-04152003-054-001	865-04152003-054-002	865-04152003-054-003	865-04152003-054-004	865-04152003-054-005	865-04152003-054-006	865-04152003-054-007	865-04152003-054-008	865-04152003-054-009	865-04152003-054-010	865-04152003-054-011	865-04152003-054-012	865-04152003-054-013	865-04152003-054-014	865-04152002-054-015	005-04150003-034-010	803-04132003-034-016	865-04152003-054-017	865-04152003-054-018	865-04152003-054-019	865-04152003-054-020	865-04152003-054-021	865-04152003-054-022	865-04152003-054-023	865-04152003-054-024	865-04152003-054-025

QUICK RESULTS SUMMARY

Laboratory Report ID 03042403

Laboratory Name: Johns Manville IH Lab Subcontract Number: KH020005

RIN:

03Z1329 N. Richen EED50285 Requestor: P.O./Charge Code:

Air	Concentration																									
Air Vol or																										
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z	Total	< 0.1 με	< 0.1 μg	< 0.1 με	<0.1 ug	< 0.1 ug	< 0.1 ug	<0.1 μρ	< 0.1 με	< 0.1 ug	< 0.1 ug	< 0.1 119	< 0.1 ug	< 0.1 µg	<0.1 ug	< 0.1 119	< 0.1 ug	0.143 ug	< 0.1 µg	< 0.1 µg	< 0.1 µg	< 0.1 μg	< 0.1 με	< 0.1 µg	< 0.1 µg	< 0.1 µg
CONCENTRATION	Front Section																									
Ŏ	Back Section											,														
Reporting	Limit	0.1 µg	0.1 μg	0.1 µg	0.1 μg	0.1 μg	0.1 ид	0.1 ид	0.1 µg	0.1 µg	0.1 ид	0.1 μg	0.1 µg	0.1 μg	0.1 μg											
Requested	Analysis	Beryllium																								
Laboratory	ID Number	03042403-026	03042403-027	03042403-028	03042403-029	03042403-030	03042403-031	03042403-032	03042403-033	03042403-034	03042403-035	03042403-036	03042403-037	03042403-038	03042403-039	03042403-040	03042403-041	03042403-042	03042403-043	03042403-044	03042403-045	03042403-046	03042403-047	03042403-048	03042403-049	03042403-050
Customer	Number	865-04152003-054-026	865-04152003-054-027	865-04152003-054-028	865-04152003-054-029	865-04152003-054-030	865-04152003-054-031	865-04152003-054-032	865-04152003-054-033	865-04152003-054-035	865-04152003-054-036	865-04152003-054-037	865-04152003-054-038	865-04152003-054-038	865-04152003-054-040	865-04152003-054-041	865-04152003-054-042	865-04152003-054-043	865-04152003-054-044	865-04152003-054-045	865-04152003-054-046	865-04152003-054-047	865-04152003-054-048	865-04152003-054-049	865-04152003-054-050	865-04152003-054-051

QUICK RESULTS SUMMARY

Laboratory Report ID 03042403

Laboratory Name: Johns Manville IH Lab Subcontract Number: KH020005 Laboratory Name:

03Z1329

RIN

N. Richen EED50285 Requestor: P.O./Charge Code:

Requested R Analysis	ted Reporting sis Limit Back Section	Back Section	- R	[전 호I	1. 1	Total	Air Vol or Q Time	Air Concentration
Beryllium		0.1 μg			٧	< 0.1 µg	ח	
Beryllium		0.1 µg			v	< 0.1 µg	n	
03042403-053 Beryllium 0.1 µg		0.1μg			v	< 0.1 µg	Ω	
Beryllium		0.1 µg			Y V	< 0.1 µg	0 =	
		0.1 μg				< 0.1 µg) [
03042403-057 Beryllium 0.1 μg		0.1 µg				<0.1 119	7174	
		0.1 µg				<0.1 no	-	
		0.1 µg				< 0.1 119	2	
		0.1 ид				× 0.1 mg	1	
		0.1 ид				< 0.1 Hg		
	mn	0.1 µg			v	<0.1 119		
		0.1 µg			<u> </u>	<0.1 119) <u> </u>	
Beryllium		0.1 µg			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<0.1 µg	D	
Beryllium	ium	0.1 µg				< 0.1 µg	D	
Beryllium		0.1 µg			'	< 0.1 µg	11	
		0.1 µg				< 0.1 ug) [1	
Beryllium		0.1 µg				< 0.1 ug	n n	
03042403-069 Beryllium 0.1 µg		0.1 µg			\	< 0.1 ug	ווע	
		0.1 ug				<0.1	╀	
		0.110				0.1 48		
Bervllium	-	0110			1	0.1 48	0;	
Beryllium		0 1 6			<u> </u>	√ 0.1 μg	D)	
Dorrylling	1	0.1 µg			Y	1	J	
03042403-075 Beryllium 0.1.1g		0.1 µg			Y `	1	n :	
Derymann		7.7 hg			<u> </u>	< 0.1 µg	D	_



QUICK RESULTS SUMMARY

Laboratory Report ID 03042403

Johns Manville IH Lab Laboratory Name:

Subcontract Number: KH020005 03Z1329

RIN

Requestor:

N. Richen EED50285 P.O./Charge Code:

		7	η		·	-	_	_	_	 -																
Air	Concentration																									
Air Vol or															RIIL										13/1/5	
_	Ø	12	=	P	12	12	Þ	1-	Þ	12	Þ	P	>	Þ	Þ	Þ		Þ	Þ	Þ	-	上		Þ	Þ	-
7	Total	<0.1 μg	< 0.1 με	<0.1 µg	<0.1 µg	<0.1 µg	< 0.1 µg	<0.1 µg	< 0.1 µg	< 0.1 µg	< 0.1 µg	< 0.1 με	< 0.1 µg	< 0.1 µg	< 0.1 µg	<0.1 µg	< 0.1 µg	< 0.1 µg	< 0.1 µg	< 0.1 µg	< 0.1 µg	< 0.1 µg	<0.1 µg	< 0.1 µg	< 0.1 µg	< 0.1 µg
CONCENTRATION	Front Section																									
	Back Section																									
Reporting	Limit	0.1 μg	0.1 µg	0.1 μg	0.1 µg	0.1 µg	0.1 μg	0.1 µg	0.1 ив	0.1 μg	0.1 µg	0.1 μg	. 0.1 µg	0.1 μg	0.1 µg	0.1 μg	0.1 µg	0.1 μg	0.1 μg	0.1 µg	0.1 μg	0.1 µg				
Requested	Analysis	Beryllium																								
Laboratory	ID Number	03042403-076	03042403-077	03042403-078	03042403-079	03042403-080	03042403-081	03042403-082	03042403-083	03042403-084	03042403-085	03042403-086	03042403-087	03042403-088	03042403-089	03042403-090	03042403-091	03042403-092	03042403-093	03042403-094	03042403-095	03042403-096	03042403-097	03042403-098	03042403-099	03042403-100
Customer	Number	865-04152003-054-077	865-04152003-054-078	865-04152003-054-079	865-04152003-054-080	865-04152003-054-081	865-04152003-054-082	865-04152003-054-083	865-04152003-054-084	865-04152003-054-085	865-04152003-054-086	865-04152003-054-087	865-04152003-054-088	865-04152003-054-089	865-04152003-054-090	865-04152003-054-091	865-04152003-054-092	865-04152003-054-093	865-04152003-054-094	865-04152003-054-095	865-04152003-054-096	865-04152003-054-097	865-04152003-054-098	865-04152003-054-099	865-04152003-054-100	865-04152003-054-101

Johns Manville IH Lab Laboratory Report ID 03042403 Laboratory Name: Johns Many

Subcontract Number: KH020005
RIN: 03Z1329
Requestor: N. Richen
P.O./Charge Code: EED50285

Requestor: P.O./Charge Code:

QUICK RESULTS SUMMARY

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Air	Concentration																		_
Air Vol or	Time															7112		1,	-
	Ø		٦		-	Э	F	E	-	Þ			5	Ŀ			þ	=	,
7	Total	5 0.218 ид	<0.1 ug	- 0.346 ug	< 0.1 ug	<0.1 µg	< 0.1 ug	< 0.1 µg	<0.1 ug	<0.1 µg	< 0.1 ug	<0.1 ug	<0.1 µg	< 0.1 µg	- 0.398 ие	<0.1 ug	< 0.1 ug	<0.1 ug	0
CONCENTRATION	Front Section														,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	Back Section										. 55								
Reporting	Limit	0.1 µg	0.1 µg	0.1 µg	0.1 из	0.1 µg	0.1 µg	0.1 µg	0.1 µg	0.1 μg	0.1 ид	0.1 μg	0.1 μg	0.1 µg	0.1 μg	0.1 μg	0.1 μg	0.1 ид	
Requested	Analysis	Beryllium	Beryllium	Beryllium	Beryllium														
Laboratory	ID Number	03042403-101	03042403-102	03042403-103	03042403-104	03042403-105	03042403-106	03042403-107	03042403-108	03042403-109	03042403-110	03042403-111	03042403-112	03042403-113	03042403-114	03042403-115	03042403-116	03042403-117	
Customer	Number	865-04152003-054-102	865-04152003-054-103	865-04152003-054-104	865-04152003-054-105	865-04152003-054-106	865-04152003-054-107	865-04152003-054-108	865-04152003-054-109	865-04152003-054-110	865-04152003-054-112	865-04152003-054-113	865-04152003-054-114	865-04152003-054-115	865-04152003-054-116	865-04152003-054-117	865-04152003-054-118	865-04152003-054-119	

's all Blanks OIL Mr. 4/20/03

QC RESULTS SUMMARY

Laboratory Report ID: 03042403

Johns Manville IH Lab Laboratory Name:

Subcontract Number: KH020005 RIN:

03Z1329

Requestor:

N. Richen EED50285 P.O./Charge Code:

100								
QC Parameter	QC Item Type	Compound	Expected	Actual	Percent	QC Sample ID	Date	Instrument
			Recovery	Recovery	Recovery		Analyzed	Run
Preparation Blank	PB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	DB030474 C
Matrix Blank	MB1	Beryllium	< 0.1 µg	<0.1 ug	N/A		4/25/2003	D-+2+0coda
Matrix Blank Spike	MS1	Beryllium	5.0 ид	5.17 µg	103.4		4/25/2003	DD020424-G
Laboratory Control Sample	LC1	Beryllium	1.1 ид	1.14 ug	103.9	OC03032716	4/25/2003	D-424-0
Laboratory Control Duplicate	LC1a	Beryllium	1.1 ug	1.14 119	103 3	000303716	4/75/2003	FD030424-G
Preparation Blank	PB2	Bervllium	< 0.1	<0.1 LG	V/N	01/700000	4/22/2003	FB030424-G
Matrix Blank	MB2	Beryllium	7 0 1	70.1 µB	V/M		4/25/2003	PB030424-G
Matrix Blank Snike	Neo	D = 11:	, 0.1 µB	-0.1 µg	IN/A		4/25/2003	PB030424-G
Totalia Diala	7 CIVI	Beryllium	5.0 µg	5.22 µg	104.3		4/25/2003	PB030424-G
Laboratory Control Sample	LCZ	Beryllium	2.2 µg	2.30 µg	104.6	QC03032717	4/25/2003	PB030424-G
Laboratory Control Duplicate	LC2a	Beryllium	2.2 µg	2.28 µg	103.7	QC03032717	4/25/2003	PB030424-G
Preparation Blank	PB3	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank	MB3	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank Spike	MS3	Beryllium	5.0 µg	5.09 µg	101.8		4/25/2003	PB030424-G
Laboratory Control Sample	LC3	Beryllium	9π 6.0	0.916 ид	101.7	OC03032718	4/25/2003	PB030424 G
Laboratory Control Duplicate	LC3a	Beryllium	0.9 ug	0.926 ие	102.9	OC03032718	4/25/2003	D-tztocodd
Preparation Blank	PB4	Beryllium	< 0.1 119	<0.1 119	N/A	01/700000	4/25/2003	FB030424-G
Matrix Blank	MB4	Bervllium	< 0.1	701.10	NI/A		4/23/2003	FB030424-G
Matrix Blank Snike	MCA	Dom:11::	2 T T C T	20.1 µB	W/N		4/25/2003	PB030424-G
I shorstory Control Commits	TOT.	Derymuni Dermi	Su u.c	5.19 µg	103.9		4/25/2003	PB030424-G
Tather County Sample	\$ 1	Beryllium	1.4 µg	1.46 μg	104.1	QC03032719	4/25/2003	PB030424-G
Laboratory Control Duplicate	LC4a	Beryllium	1.4 µg	1.44 µg	103.1	QC03032719	4/25/2003	PB030424-G
Preparation Blank	PB5	Beryllium	< 0.1 µg	<0.1 μg	N/A	2	4/25/2003	PB030425-A
Matrix Blank	MB5	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PR030425-A
Matrix Blank Spike	MS5	Beryllium	5.0 µg	5.00 ид	100.0		4/25/2003	DE020122-73
Laboratory Control Sample	rcs	Beryllium	0.8 ид	0.811 ие	101.4	OC03032725	4/25/2003	DD020425-A
Laboratory Control Duplicate	LC5a	Beryllium	0.8.119	0.827.119	103.4	000000000	2007/27/4	FD03042
			200	0.027 HB	r.co.	C7/702027	4/22/2003	PB030425-A

QC RESULTS SUMMARY

Laboratory Report ID: 03042403

Johns Manville IH Lab Laboratory Name:

Subcontract Number: KH020005
RIN: 03Z1329
Requestor: N. Richen
P.O./Charge Code: EED50285

P.O./Charge Code:

470									
QC Parameter	QC Item Type	Compound	Expected	Actual	Percent	QC Sample ID	Date	Instrument	
			Recovery	Recovery	Recovery		Analyzed	Rim	
Preparation Blank	PB6	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PR030425-A	
Matrix Blank	MB6	Beryllium	< 0.1 ug	<0.1 με	N/A		4/25/2003	PB030425 A	
Matrix Blank Spike	MS6	Beryllium	5.0 με	4.96 119	99.3		4/25/2003	DD030425 A	
I shometowy Control Commis	100	D 11:		2			C007/C7/L	FD030423-A	
Laboratory County Sample	977	beryllium	gμ c.I	1.51 µg	100.4	QC03032726	4/25/2003	PB030425-A	
Laboratory Control Duplicate	TC6a	Beryllium	1.5 µg	1.47 ид	8.76	OC03032726	4/25/2003	PR030425. A	
				,				47.01.000	

(a) (29 (a) (b) (a) (a) (b) (a) (a) (b) (b) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	(time/date)	74				
321329 64 Title 865 BE WIPES	3_	Contact/Requester				
WIPES	8		HHY "HICHEINM			
TILO BEWIPES				Purchase Order/Charge Code		
		Logbook No.		Ice Chest No.	Temp	
Johns Manville	Me	Method of Shipment		BIII of Lading/Air Biii No.		
Protocol	B	Related COC (if any)		PR		
POSSIBLE SAMPLE HAZARDS/REMARKS			SCRE	SPECTAL INSTRICTIONS		
Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES Are other known hazardous substances present? YES (NO ** ** ** ** ** ** ** ** ** ** ** ** **	3 Table III YES NO		REGOT	6		
Customer O. Number	Date/Time	Location	Container (size/type)	Sample Analysis [Field-Filtered] LIC (Method Titta) (TAT)//Denometer Literal	notor Lot	Preservative:
03Z1329 865-04152003 SURFACE -001.001 -054-001	111	Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (BERYLLIUM)	Lpe (Wh) [24hrs]	N.A.
03Z1329 865-04152003 SURFACE -002,001 - 054-002	201	Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (BERYLLIM)	Lpe (Wh) [24hrs]	N.A.
03Z1329 865-04152003 SURFACE -003.001 - 054-003		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (BERYLLIUM)	Lpe (Wh) [24hrs]	N.X.
865-04152003 01 - Q54-004		Room(s): HIGH BAY	1-SAMPL	INGIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (BERYLLIUM)	[pe (Wh) [24hrs]	NA;
865-04152003 (- 054-005		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (BHRYLLUM)	De (Wh)[24hrs]	N'A A'A'
865-04152003 01 054-006		Room(s); HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (BRRYLLUM)	De (Wh) [24hrs]	NA: A A:
03Z1329 865-04152003 SURFACE - 007.001 - 054-007		Room(s): HIGH BAY	1-SAMPL E	INGIDIO4 (OSHA 125/ICP-AES De Filters Swipe (BERYLLIUM)	pe (Wh) [24hrs]	NA;
03Z1329 865-04152003 SURFACE -008.001 - 054-008		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (BERYLLUM)	.pe (Wh) [24hr8]	žž.
03Z1329 865-04152003 SURFACE -009.001 - 054-009		Room(s): HIGH 1 BAY E	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (BERYLLIUM)	pe (Wh) [24hrs]	N'A;
Belliffmilland Bod 11	6					
2121/20-53-4 JULY	Mouse	43563	15/5	Received By: Date/Time Received By:		Date/Line
Date/Time	Received By:		Date/Lime Re	Relinquished By: Date/Time Received By:		
	Received By:		Date/Time Re	Relinquished By: Date/Time Received By:		i d
FINAL SAMPLE Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical	ser, disposed of per lab pro		(ssaoou	Disposed By Date (Time COC	Date Clark COCC + COCCC + COC	

3H 1-SAMPL II 3H 1-SAMPL II 3H 1-SAMPL II 3H 1-SAMPL II DiscTime Relia	H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM) 3H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM) 3H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM)) 3H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM)) Dieffine (BERYLLIUM) Dieffine Relinquiched By: Date (BERYLLIUM)	H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM) 3H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM) 3H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM)) 3H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM)) Dieffine (BERYLLIUM) Dieffine Relinquiched By: Date (BERYLLIUM)	H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM) 3H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM) 3H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM)) 3H 1-SAMPL INOIDIO4 (OSHA 125/ICP-AES Be (BERYLLIUM)) Dieffine (BERYLLIUM) Dieffine Relinquiched By: Date (BERYLLIUM)	Received By: Received By: High 1-SAMPL IROIDD104 (OSHA 125/ICP-AES Be BAY E BERYLLIUM
F. AMPL INQIDITO 4 (OSHA 125/ICP-AES F. AMPL INQIDITO 4 (OSHA 125/ICP-AES E. AMPL INQIDITO 4 (OSHA 125/ICP-AES BERYLLIUM	F. AMPL INQIDITO 4 (OSHA 125/ICP-AES F. AMPL INQIDITO 4 (OSHA 125/ICP-AES E. AMPL INQIDITO 4 (OSHA 125/ICP-AES BERYLLIUM	F. AMPL INQIDITO 4 (OSHA 125/ICP-AES F. AMPL INQIDITO 4 (OSHA 125/ICP-AES E. AMPL INQIDITO 4 (OSHA 125/ICP-AES BERYLLIUM	F. AMPL INQIDITO 4 (OSHA 125/ICP-AES F. AMPL INQIDITO 4 (OSHA 125/ICP-AES E. AMPL INQIDITO 4 (OSHA 125/ICP-AES BERYLLIUM	GE-04152003 SURFACE Room(s): 1-5AMPL INQ1D10.4 (OSBA 125/ICP-ARS -054-020 SURFACE Room(s): HIGH 1-5AMPL INQ1D10.4 (OSBA 125/ICP-ARS -054-021 SURFACE Room(s): HIGH 1-5AMPL INQ1D10.4 (OSBA 125/ICP-ARS -054-022 SURFACE Room(s): HIGH 1-5AMPL INQ1D10.4 (OSBA 125/ICP-ARS -054-023 SURFACE Room(s): HIGH 1-5AMPL INQ1D10.4 (OSBA 125/ICP-ARS -054-023 SURFACE Room(s): HIGH 1-5AMPL INQ1D10.4 (OSBA 125/ICP-ARS -054-023 SURFACE Room(s): HIGH 1-5AMPL INQ1D10.4 (OSBA 125/ICP-ARS -054-024 Room(s): HIGH 1-5AMPL INQ1D10.4 (OSBA 125/ICP-ARS -054-024 Room(s): HIGH 1-5AMPL IND1D10.4 (OSBA 125/ICP-ARS -156/ICP-ARS -156/ICP-AR
3H 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL Date/Time R Date/Time R	HE SAMPL 1 SAMPL 1 SAMPL 3H 1 SAMPL 3H 1 SAMPL 3H 1 SAMPL Date/Time R Date/Time R 1 Pose	3H 1-SAMPL 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL Date/Time R	3H 1-SAMPL 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL 3H 1-SAMPL Date/Time R	SURFACE Room(s): High J.SAMPL 1-SAMPL
	BAY Room(s): I- Room(s): H	Room(s): Higher Bay Room(s): Higher Bay Received By: Re	SURFACE SUR	SURFACE Room(e): -054-018 SURFACE Room(e): -054-019 SURFACE Room(e): -054-019 SURFACE Room(e): -054-021 SURFACE Room(e): -054-022 SURFACE Room(e): -054-023 SURFACE Room(e): -054-024

Customer Number Number 865-04152003 - 054-025 865-04152003 - 054-028 865-04152003 - 054-028 865-04152003 - 054-030	5	SCAC SCAC	Contact/Requester SCAGGIARI, SHERR BAY Room(s): HIGH BAY BAY Room(s): HIGH BAY BAY BAY Room(s): HIGH BAY	ERRY**RICHENM Container (stzetype) 3H 1-SAMPL IRO	Contact/Requester SCAGGIARI, SHERRY**RICHENM SCAGGIARI, SHERRY**RICHENM Container Cont		Presect
00.1 Customer Number Number Number Number Number Secont 152003	5	SCAC SCAC SCAC SCAC SCAC SCAC SCAC SCAC		Y***RICHEN Container (stzetype) (stzetype)) 70TQ	1 •	Preserve
00. Number Number Number 0. Number 0. Number 0. 0.54-025 0. 0.54-025 0. 0.54-026 0. 0.54-026 0. 0.54-027 0. 0.54-028 0. 0.54-029 0. 0.54-029 0. 0.54-029 0. 0.54-030 0. 0.54-030 0. 0.54-030 0. 0.54-030 0. 0.54-032 0. 0.54-035 0. 0.54-035 0. 0.54-035 0. 0.54-035 0. 0.54-035 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0.54-035 0. 0. 0. 0. 0.54-035 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.				Container (sizertype) (SAMPL 1	10104 (c		Preservative
865-04152003 - 054-025 001 - 054-026 865-04152003 - 054-027 865-04152003 001 - 054-029 001 - 054-029 865-04152003 001 - 054-030 865-04152003 001 - 054-030 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003		WESTERSON OF THE PROPERTY OF T	HIGH HIGH		ع حا	•	
001	URFACE URFACE URFACE URFACE URFACE		HIGH HIGH		(OSHA 125/ICP-ARS Be	Swipe (Wh.	超速さらし
865-04152003 001	URFACE URFACE URFACE URFACE URFACE		HIGH HIGH	┞			N'A; N'A
865-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003 965-04152003	URFACE URFACE URFACE URFACE URFACE	A STANDARD S	HIGH (%)		INOIDIO4 (OSHA 125/ICP-AES Be Filters	ers Swipe (Wh)[24hrs]	, XX,
001 - 054-027 865-04152003 001 - 054-029 865-04152003 001 - 054-030 865-04152003 001 - 054-031 865-04152003 001 - 054-032 865-04152003 001 - 054-033 001 - 054-033 001 - 054-033 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003	URFACE URFACE URFACE URFACE	The second secon		1000	INOIDIO4 (OSHA 125/ICP-AES Be Filters	ers Swine (Wh.) [24hmg]	N/A
001 -054-028 865-04152003 001 -054-029 865-04152003 -054-030 -054-031 -054-031 -054-032 001 -054-033 -054-035 001 -054-033 -054-036 -054-036 -054-036	URFACE URFACE URFACE	The state of the s	* 8 8	5-2-X	ли}	•••••	ŠŠ
865-04152003 865-04152003 - \$54-030 - \$54-030 001 - \$54-031 - \$5-04152003 - \$5-04152003 - \$5-04152003 865-04152003 865-04152003 - \$54-035 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003	URFACE URFACE URFACE URFACE			1-SAMPL I	INOIDIO4 (OSHA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh) [24hrs]	÷ X X X
865-04152003 865-04152003 101 - 054-031 865-04152003 101 - 054-032 865-04152003 101 - 054-035 101 - 054-035 101 - 054-035 101 - 054-035 101 - 054-036 101 - 054-036	URFACE URFACE URFACE		:	1-SAMPL I	INGIDIO4 (OSEA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh)[24hrs]	NA; NA;
865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003 865-04152003	URFACE URFACE URFACE			1-SAMPL I	INGIDIO4 (OSHA 125/ICP-AES Be Filters	ers Swipe (Wh) [24hrs]	N. A.
865-04152003 865-04152003 101 - ©54-033 865-04152003 101 - ©54-035 865-04152003 101 - ©54-036 865-04152003 865-04152003	URFACE		Room(s): HIGH 1 BAY E	1-SAMPL I	INOIDIO4 (OSHA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh)[24hrs]	N.Y.
865-04152003 - \$54-033 865-04152003 - \$54-035 865-04152003 101 - \$54-036 865-04152003	JRFACE	à	Room(s): HIGH 1- BAY E	1-SAMPL I	IHOIDIO4 (OSHA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh)[24hrs]	N.A;
865-04152003 001 ~ \$\tilde{\O}\$54-035 865-04152003 001 ~ \$\tilde{\O}\$54-036 865-04152003	1		Room(s): HIGH 1: BAY	H	THOIDIG4 (OSHA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh) [24hrs]	ž, Š, Š
865-04152003 - \$54-036 865-04152003	SURFACE	č	표		INDIPION (OSHA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh)[24hrs]	N. W.
865-04152003	SURFACE	ά .	표	Η.	INDIDIO4 (OSBA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh)[24hrs]	NA: NA
750-450	SURFACE	č	HIGH	1-SAMPL I	IHOIDIO4 (OSHA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh)[24hrs]	NA.
865-04152003 001 ~054-038	SURFACE	č	Room(s): HIGH 1- BAY E	1-SAMPL I	IHOIDIO4 (OSHA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh)[24hrs]	N N N N
	SURFACE		Room(s): HIGH 1: BAY E	1-SAMPL I	IHOLDIO4 (OSHA 125/ICP-AES Be Filters (BERYLIUM)	ers Swipe (Wh)[24hrs]	ž× XX XX
865-04152003 / 1 - \$ 54-040	SURFACE	<u>~</u>	Room(s): HiGH 가	SAMPL	IHGIDIO4 (OSHA 125/ICP-AES Be Filters (BERYLLUM)	ers Swipe (Wh) [24hrs]	ŠŽŽ Š
1.10 4-23-03/	1515 Morelyed By:	32 16	स्तिह ्र	Date College	Relinquished By: Date/Time R	Received By:	Date/Time
)	nate/Time Received By			Date/Time Relli	Relinguished By: Date/Time Ru	Received By:	Date/Time
Relinquished By: Date	Date/Time Received By:	<u>.</u>		Date/Time Relit	Relinquished By: Date/Time Re	Received By:	Date/Time
FINAL SAMPLE Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical DISPOSITION	d to customer, disposed o	of per lab procedure,	used in analytical process)	(982	Date/Tin	Date/Time COC printed: 04/22/03 13:22 (Version:coc_120/mb)	on:coc_r20(mit)

SEKVICES //	REETS .		VIIV								
RIN 03Z1329		THE THE PERSON OF THE PERSON O	4/23/3	Contact/I SCAG	Contact/Requester SCAGGIARI, SHE	ERRY**RICHENM		Teleptione No. 2155/212-3176	3176		Established
Bottle No.	Customer Number	Matrix	Date/Time	2	Location	Container (size/type)	[Fleid-Filtered] LIC	Sample Analysis ed] LIC (Method Title) ITA	Sample Analysis (Method Title) ITATI/(Parameter List)	er List)	Preservative Packing
77329 -040.001	865-04152003	SURFACE				GH 1-SAMPL	INGIDIO4 (OSHA 125/ICP-ARS Be Filters (BERYLIUM)	/ICP-ARS Be	Filters Swipe	(Wh) [24hrs]	žž ŽŽ
03Z1329 -041.001	865-04152003 - 0 54-042	SURFACE		Œ	Room(s): HIG BAY	GH T-SAMPL	THOIDIO4 (OSHA 125 (BERYLLIUM)	125/ICP-AMS Be 1	Filters Swipe	(Wh) [24hrs]	, K K K K K K K K K K K K K K K K K K K
03 Z 1329 -042.001	865-04152003 - © 54-043	SURFACE		Œ	Room(s): HIG BAY	GH NSAMPL E	IROIDIO4 (OSHA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh)[24hrs]	S S
03Z1329 -043.001	865-04152003 - 0 54-044	SURFACE		CC.	Room(s): HIG BAY	GH F.SAMPL	INGIDIO4 (OSHA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24hrs]	Z.A.
03Z1329 -044.001	865-04152003 - 054-045	SURFACE		05	Ī	GH 1:SAMPL E	INOIDIO4 (OSHA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24hrs]	Z Z Z
03Z1329 -045.001	865-04152003 - 054-046	SURFACE		<u> </u>	=	GH 1-SAMPL E	INOIDIO4 (OSHA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24hrs]	N'A.
03Z1329 -046.001	865-04152003 \ -054-047	SURFACE		Œ.	Room(s): HIG BAY	GH 1.SAMPL E	TROIDIO4 (OSHA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24hrs]	Z A A A
03Z1329 -047.001	865-04152003 0 54-048	SURFACE		Œ.			TROIDIO4 (OSEA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24hrs]	Z Z S X
03Z1329 -048.001	865-04152003 - © 54-049	SURFACE		Œ	= 1	GH (-SAMPE	THOIDIO4 (OSHA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24hrs]	N K K
03Z1329 -049.001	865-04152003 ~ 0 54-050	SURFACE		Œ.	Room(s): HIG BAY	ан (†:\$ХМРС Е	IHOIDIO4 (OSEA 125 (BERYLLUM)	125/ICP-AES Be I	Filters Swipe	(Wb) [24brs]	ÄÄ
03Z1329 -050.001	865-04152003 - 0 54-051	SURFACE		ă.	= -	GH 1-SAMPL E	INDIDIO4 (OSEA 125 (BERYLLUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24brs]	ÄŠ
03 Z 1329 -051.001	865-04152003 - 054-052	SURFACE		Œ.	Room(s); HIG BAY	GH FSAMPL	INGIDIO4 (OSEA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24hrs]	ÄŠ
03Z1329 -052.001	865-04152003 - 0 54-053	SURFACE		Œ.	Room(s): HIG BAY	GH 1-SAMPL E	THOIDIO4 (OSHA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24hrs]	Z Z V A
03Z1329 -053.001	865-04152003 ~ 0 54-054	SURFACE		Œ.	Room(s): HIG BAY	GH 1-SAMPĹ	THOLDIO4 (OSHA 125 (BERYLLIUM)	125/ICP-AES Be 1	Filters Swipe	(Wh) [24hrs]	Z'A K'A
03 Z 1329 -054.001	865-04152003 - © 54-055	SURFACE		<u>æ</u>	Room(s): HIG BAY	GH T-SAMPL	INOIDIO4 (OSHA 125 (BERYLLUM)	125/ICP-AES Be I	Filters Swipe	(Wh) [24hrs]	N/A; N/A
Relief of Stripe	A 4-23-03		Received By:	7	5363	Date/Time 1	Relinquished By:	Date	Date/Time Received By:		Date/Till
Relinquished By:		/ Date/Time	Received By:			Date/Time I	Relinquished By:	Date/Time	Time Received By:		
Relinquished By:		Date/Time	Received By:	2. <u>2</u>		Date/Time	Relinduished By:	Date/Time	Time Received By:	•	DateCf
FINAL SAMPLE	E Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytic	sturned to custon	ner, disposed of per li	ub procedure,	used in analytica	al process)	Disposed By		000		

¥	Preservative;	0					2 Mar. (1, 2, 2)			to tell									
	Prese	Ž Ž Ž Ž	ŽŽ	X X A A	N N N A	X X X X	Ž Ž Ž Ž	ž ž	ž Š Š Š	\$ \$	\$\$	ij ŽŽ	ÿĕ	K X X	\$ \$	Z Z Z Z]a	8	۵
		.) [24hrs]	.) [24hrs]	.)[24br8]	.) [24brs]	.) [24brs]	4brs]	.)[24brs]	.) [24hrs]	(Wb) [24hrs]	.) [24hrs]	thrs]	(4pr8]	thrs]	.)[24brs]	4hrs]			
	()S	•	(Wh) [] (· · · · · ·) [(Wh) [;	(Wb)	(Wh) [24hrs]	(3d)	(wb) [3		(wb) [2	(Wh) [24hrs]	(Wh) [24hrs]	(Wb) [24hrs]	(wh) [2	(Wh) [24hrs]		e e eperation	
	Sample Analysis Field-Filtered LIC (Method Title) ITATI/(Parameter List)	sarbe (1	swipe ()	v) edias	Swipe (V	Swipe (v	Swipe (F	Swipe (F	a) edjag	Swipe (W	Swipe (F	W) eding	Swipe (W	Swipe (W	Swipe (W	W) edfag	, s	5	X
	S ATI//Pan	ers S	1	1	1	1	i				•	l .	1	1	1	3	Received By:	Received By:	Received B
lephone No. 2155/212-3176	Sample Analysis Method Title) [T/	125/ICP-AES Be Filters	Be Filters	Be Filters	Be Filters	Be Filters	• Filters	• Filters	• Filters	• Filters	• Filters	• Filters	• Filters	• Filters	e Filters	• Filters	Date/Time	Date/Time	Date/Time Received By:
Telephone No. 2155/212-	Sample (Methor	-AES P	1	1		1	-AES Be	-AES Be	-AES Be	-AES Be	-AES Be	-AES Be	AES Be	-AES Be	-AES Be	AES Be			1
	tered] LIC	25/ICP	125/ICP-AES	125/ICP-AES	125/ICP-AES	125/ICP-AES	125/ICP-AES	125/ICP	125/ICP-AES	125/ICP-AES	125/ICP-AES	125/ICP-AES	125/ICP-AES	125/ICP-AES	125/ICP-AES	125/ICP-AES			
	[Fleld-Fil	(OSHA 1	SHA		SHA	SHA	SHA	1.25	1	SHA	SHA	SHA	SHA	SHA	SHA	SHA			
		1 5	(BERYLLIUM)	IHOIDIO4 (OSHA (BERYLLIUM)		1 5	THOIDIO4 (O	THOIDIO4 (OSEA (PERYLLIUM)	emothica (osea (beryllium)				. 5		_		od By:	e By:	er ed By:
ENS		H	H	w	Н		THOTAL (BBB)	間	and the second	H	H Con	Н	H /	THOLDIO4	TROIDIO4	TEOLOGO WBERYLLIN	Relinquished By	Relinquished By	Relinquished By
ERRY**RICHENM	Containier size/Aype)	1-SAMPL	1-SM-701	1-SAMPL E	1-SAMPL	1-SAMPL	J-SWWb.	1-SAMPL E	1-SAMPL	T-SAMPL	1-SAMPL E	1-SAMPL E	T-SAMPL E	1-SAMPL	T-SAMPL	#-SAMPL E-18 - 18 €	Date/Time	Date/Time	Date/Time
		重	-IIGH		Carlot St.		表	法	HIGH	HGH	표	ᄪ	HOH.	IIGH	HOH		0		Transfer St.
Requester	Location	Room(s): I	Room(s): PBAY	Room(s):	Room(s):	Room(s):	Room(s): H BAY	Room(s): HIC BAY	Room(s); BAY	Room(s): 1 BAY	Room(s): HIGH BAY	Room(s): BAY	Room(s): I BAY	Room(s): F BAY	Room(s): 1 BAY	Room(s):	feat		
Confact/Requester SCAGGIARI, SH		<u>L</u>	4				<u>ac</u>	Z	Œ	C .	c .		<u>a. </u>	Œ	Œ,		25		
	Date/Time										-				·		of By:	By:	By:
4123193	-	<u> </u>	3 3 101	111	111	111	101	104						100	101		Recipe	Received By	Received By:
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	•						0)	。 入	o	os .	<i>6</i>	65	<i>σ</i>	σ	σ —	s			
	Customer Number	865-04152003 - 6 54-056	865-04152003 - 054-057	865-04152003 - 0 54-058	865-04152003 - 0-54-059	865-04152003 - © 54-060	865-04152003 ~ © -54-061	865-04152003 -0-54-062	865-04152003 - © 54-063	865-04152003 - 0 54-064	865-04152003 -054-065	865-04152003 ~ 0 54-066	865-04152003 - 0 54-067	865-04152003 - 0 54-068	865-04152003 - 0 54-069	865-04152003 - 0 54-070	4-23-03		
		865-04	865-04	865-04	865-04	865-04	865-04	865-04 -1-0	865-04	865-04	865-04	865-04	865-04	865-04	865-04	865-04	ر م		Calinguished By: Date Time Received By:
1329	Sottle No.	Z1329 -055.001	21329 -056.001	21329 -057.001	21329 -058.001	Z1329 -059.001	Z1329 -060.001	321329 -061.001	z1329 -062.001	z1329 -063.001	21329 -064.001	21329 -065.001	Z1329 -066.001	Z1329 -067.001	21329 -068.001	21329 -069.001	hod By:	1	ished By:
RIN 03Z1329	Bott	03Z1329 -055.0	03Z1329 -056.0	03Z1329 -057.00	03Z1329 -058.0	03Z1329 -059.0	03Z1329 -060.0	08Z13	03Z1329 -062.00	03Z1329 -063.0	03Z1329 -064.0	03Z1329 -065.0	03Z1329 -066.0	03Z1329 -067.0	03Z1329 -068.0	03Z1329 -069.0	Realing		

SERVICES	RFETS	2						****
RIN 03Z1329		1 H2303		Contact/Requester SCAGGIARI, SHER	ERRY**RICHENM	Telephone No. 2155/212-3176		
Bottle No.	Customer	Matrix	Date/Tim	Location	Container (size/type)	Sample Analysis [Field-Filtered] LIC (Method Title) [TATJ/(Parameter List)		Preservation Packing
03Z1329 -070.001	865-04152003	SURFACE		Room(s); HIGH BAY	1-SAMPL	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERYLLUM)	(Wh) [24hrs]	N.A.
03Z1329 -071.001	865-04152003 - Q 54-072	SURFACE		Room(s): HIGH BAY	1-SAMPL	INCIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh. (BERYILIUM)	(Wh) [24hrs]	ž Y Š Y
03Z1329	865-04152003	SURFACE	2 (Appl.)	Room(s): HIGH BAY	T.SAMPL	INGIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERYLLIUM)	(Wh) [24hrs]	XX. AX.
3Z1329 -073.001	865-04152003 - Q 54-074	SURFACE		Room(s): HIGH, BAY	1-SAMPL	IMOIDING (OSEA 125/ICP-AES Be Filters Swipe (Wh. (BERYILUM)) [24brs]	N.A.
03Z1329 -074.001	865-04152003 ~ © 54-075	SURFACE	American Service Control of Contr	Room(s); HIGH BAY	1-SAMPL E	INOIDIGE (OSHA 125/ICP-ARS Be Filters Swipe (Wh. (BERYLLIUM)	(Wh) [24hrs]	Ž Ž Ž Ž
03Z1329 -075.001	865-04152003 - © 54-076	/ SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERYLLUM)	(Wb) [24brs]	NA;
03Z1329 -076.001	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERXILIUM)	(Wh) [24hrs]	Z, Z,
03Z1329 -077.001	865-04152003 - 354-078	SURFACE	**************************************	Room(s): HIGH BAY	NSAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERYLLIUM)) [24hrs]	Z Š Š Š
03Z1329 -078.001	865-04152003 - 054-079	SURFACE		Room(s): HIGH BAY	ASSAMPL F	IHOIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh. (BERYLLIUM)) [24brs]	NA.
03Z1329 -079.001	865-04152003	SURFACE		Room(s): HIGH BAY	#SAMPL E	INOLDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh. (BERYILIUM)) [24brs]	N/A:
03Z1329 -080.001	865-04152003 - 054-081	SURFACE		Room(s): HIGH BAY	1-SAMPL	IHOIDID4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERYLLIUM)	(Wh) [24hrs]	Ä X X X
03Z1329 -081.001	865-04152003 - <u>\$</u> -54-082	SURFACE	2	Room(s): HIGH BAY	T-SAMPL E	IHOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERYILIUM)) [24bz8]	Z X X X
03Z1329	865-04152003 0 -54-083	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IHOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERYILIUM)) [24hrs]	N. K. K. K. K. K. K. K. K. K. K. K. K. K.
03Z/329 083.001	865-04152003 - 6 54-084	SURFACE		E E	1-SAMPL E	IHOIDID4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERYLLUM)	(Wh) [24hrs]	ŽŽ ŽŽ
03Z1329 -084.001	865-04152003 - 0 54-085	SURFACE	Control of the Contro	Room(s): HIGH BAY	1-SAMPL E	IHOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh. (BERYILIUM)	(Wh) [24hrs]	ž Ž Ž
Relinquished By	M- 4-232	03/1515 (Property By:	4/25/6	Directime R	Relitiquished By: Date/Time Received By:		Date/Tin
Relipquished BY:		/ Date/Time R	Received By:		Date/Time R	Relinifyliabed By: Date/Time Received By:		Date/Time
Relinquished By:		Date/Time R	Received By:		Date/Time R	Relinquished By: Date/Time Received By:		Date/Time
FINAL SAMPLE		returned to custome	Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytica	dure, used in analytical pi	d process)	Disposed By	10000000	

SERVICES	RS RFETS	11	CHAIN	CHAIN OF CUSTODY/SA	MPLEAN	SAMPLE ANALYSIS REQUEST	Page 7 of 9
RIN 03Z1329		(52/1)	%	Contact/Requester SCAGGIARI, SHER	ERRY**RICHENIA	Telephone No.	
Bottle No.	Customer Number	Matrix	Date/Tim		(Size/type)	[Field-Filtered] LIC	Preservative
03Z1329 -085.001	865-04152003 - © 54-086	SURFACE		Room(s): HIGH BAY		INDIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] (BERYLLIUM)	22
03Z1329 -086.001	865-04152003	SURFACE		<u>T</u>	Ti-SAMPL	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLUM)	is] N/A;
03Z1329 -087.001	865-04152003	SURFACE	• •	Room(s): HIGH BAY	H-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] (BERYLLIUM)	'81 N/A;
03Z1329 -088.001	865-04152003 - 054-089	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLIUM)	
03Z1329 -089.001	865-04152003 - 954-090	SURFACE		Room(s):	# SAMPL E	INCIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] (BERYLLIUM)	-
03Z1329 -090.001	865-04152003 - @ 54-091	SURFACE		Ē	1-SAMPL E	IHGIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLIUM)	N.A.
03Z1329 -091.001	865-04152003	SURFACE		I	1-SAMPL E	IMOUDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] {BBKYLLUM}	8] N.A.
03Z1329 -092.001	865-04152003 6 54-093	SURFACE		表	A-SAMPL E	INGIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BBRXLLIUM)	81 N/A; N/A
03Z1329 -093.001	865-04152003	SURFACE		HO.	4-SAMPL E.	INGIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] [BERYLLIUM]	NA:
03Z1329 - 094.001	865-04152003	SURFACE	** The state of th	法	1-SAMPL E	INCIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh) [24hrs] (BERYLLIUM)	81 N.A.
03Z13Z9	865-04152003 - 0 54-096	SURFACE	The second of th	ĒΕ	f-SAMPL E	INGIDIO4 (OSHA 125/ICP-ARS Be Filters Swipe (Wh) [24hrs] (BERYLLUM)	sı N/A; N/A
03Z1329 -096.001	865-04152003 - 0 54-097	SURFACE		IGH,	1-SAMPL E	INGIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] (BERYLLIUM)	SI N/A;
03Z1329 -097.001	865-04152003 - © 54-098	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IROIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLIUM)	NA;
03Z1329 -098.001	865-04152003 - Q 54-099	SURFACE		Room(s): HIGH BAY	1-SAMPL E	INOIDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -099.001	865-04152003 -054-100	SURFACE		Room(s):	20	THOLDIO4 (OSHA 125/ICP-AES Be Filters Swipe (Wh)[24hrs] (BERYLLIUM)	NA.
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RIN 03Z1329		11/2	4/23/93	Contact/Requester SCAGGIARI. SHER	BBY"BICHENM	N.	Telephone No.		
Bottle No.	Customer Number	Matrix	Date/⊓m		Container (Size/type)		Sample Analysis	Sample Analysis Fileld-Filteredi LiC (Method 7ttle) ITATI//Perameter Licht	Preservative
03Z1329 -115.001	865-04152003	SURFACE	M.	Room(s):	Japane 1	THOIDIO4 (O	(OSEA 125/ICP-AES Be Filters	#ilters Swipe (Wh) [24hrs]	⋛Ž
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03Z1329	865-04152003	SURFACE	W.	Room(s):	1-SAMPL	INGIDIO4 (O	(OSHA 125/ICP-AES Be	Filters Swipe (Wh) [24hrs]	
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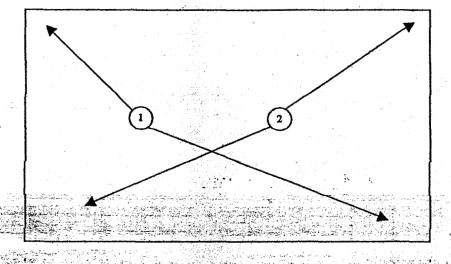
Mfg. Model Serial#		(c <u>r</u> 31/27)			Maria (Cara Cara Cara Cara Cara Cara Cara Ca	MORE TO SECURE		SANSATOR STORES AND STORES			
Model	•				VSD-V-A)			Nexe	7, 53 (2) (7)		
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	2929	Model	2929	· · · · · · · · · · · · · · · · · · ·	NE Electra			e: Contar	nination		· · · · · ·
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Cal Due	6-11-03	Cal Due	6-9-03	Serial #	3248	• · · · · · · · · · · · · · · · · · · ·			pad trailer		
Bkg.	0.6 cpm g			Cal Due	7-9-03		ose:	Survey o	f new plastic	c bags for sv	vipes.
Efficiency		Efficiency	0.6 cpm α		6 cpm α	•					
MDA	18 έρm α	-	**************************************	Efficiency		1	#. <u> </u>		. N/.	A	
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Model	2929	Mfg.	Ludlum		NE Electra						
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Seriai#_ Cal Due	176082	Serial #	176102	Serial #	3248				1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
_ 101 (01 🖚	6-11-03	Cal Due _	6-9-03	Cal Due	7-9-03	<u> </u>			1		
	87.6 cpm β	-	71.8 cpm β	Bkg.	610 cpm B	5 75 2 2 2 2 2		N/A		N/A /	N/A
Efficiency	38.6 %	Efficiency	40.8 %	Efficiency			P	rint name	Sig	nature	Emp.
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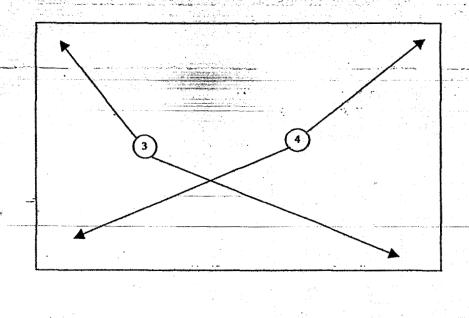
Print Name

RS Supervision:

021113-1730E-012 Page 2014 (1) 9/23/19

SURVEY DENOTED BELOW IS TYPICAL FOR ALL (4) BAGS SURVEYED FOR RIN #032/329.





PPO 16	4-RSP-07:01 (effective	7/12/01)						
te Revie	wed: 4/22/03	RS Super	vision:					
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5	3 -					See	beryllium sample log	
4	N/A	N/A	N/A		 		•	ž.
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2	Be smear # 009	72	<205	IVA	N/A	1		
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	865-04152003-05		-04152003		865-041	52003-054-042	865-04152003-054	
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	nts: Isotope of concern	u is depicted un	mum (U-2	38): Wipe	results are	denoted below.	<u>. 4</u>	
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ff. 38		.8 %β E	iff.	,		Print Name	Signature	\ N/A Emp. #
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al Due	6-11-03 Cal Due		al Due				. : '	-
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fg.	Ludlum Mfg.	Ludlum M	<u> </u>		Date:	4-22-03	Time:	1430
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erial#	176082 Serial #		Serial #		•	865		
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Mfg.	Ludlum	Mfg. Lud		Mfg.	N/A		Survey T		Contamina				
Model			2929	Model	17/2	1	Building:			шоп	Page	<u>l</u> 0	1
Serial		•	6102	Serial #			Location:		p-off Pad			·	
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	0.6 cpm α		cpm α		-		ruipose.	Re	lease of beryin	ium wipe	s from B-86	2	
	35.5 %α		%α	Bkg			RWF	ш.			NT/A		
MDA	18 dpm α		dpm α		- NT/A		KWI	#			N/A		
MUA	10 upin a	MDA 205	ирш и	MDA	N/A	<u> </u>	Data		4 00 00	-	35	1 #00	
Mfg.	Ludlum	Mfg. Ludl		1/6-	NT/A		Date:		4-22-03		ime:	2 1430	
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		*	6102	Serial #							<i></i>		
Cal Du			9-03	Cal Due						_			
	82.1 cpm β	Bkg. 70.2		Bkg.			RCT:		N/A	1	N/A		N/A
_	38.6 %β		%β	Eff.				Pr	rint Name		Signature		Emp. #
MDA	205 dpm β	MDA 205	dpm β	MDA	N/A	<u> </u>							
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ATTACHMENT D

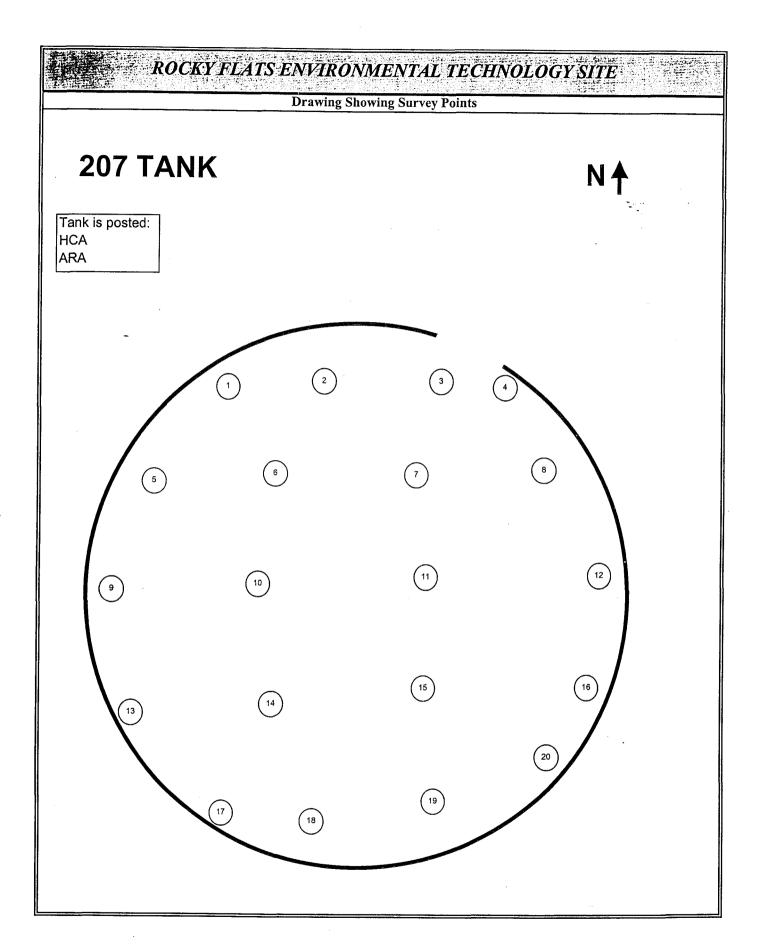
Tank 207 Demolition Survey Data

ATTACHMENT D1

Tank 207 Pre-Demolition Rad & Be Survey Data

Tank 207

Efficiency 42.9 % Efficiency 38.3 % Efficiency Print name Sign MDA 205 dpm α MDA 205 dpm α MDA NA PRN/REN #: NA Comments: Survey performed following sludge removal. Survey RESULTS Swipe		RO	CKY FL	ATS EN	VIRON	MENTA.	L TECH	NOLO	GY SITI	5	
Model 2929	TO LOSSIC CALLED THE		INSTRUM	ENT DATA	<u> 2000-, 0, 285 0000</u>				to entra the transfer of	n n eg a Jaman i Balaka Saka ngeb	erosen in project
Model 2929	Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NA	Survey ty	pe: Conta	amination		
Serial # 147727 Serial # 105885 Serial # Location: Inside Tank	_				· —						
Cal Due					_		-l ~				
Bkg. 0.3 cpm a Bkg. 0.2 cpm a Bkg. Prior → Prix + (v ∈ Prix + (v ∈ Prix + v)) Efficiency 33.5 % Efficiency 36.9 % Efficiency ▼ RWP #: 02-RISS MDA 18 dpm a MDA 18 dpm a MDA NA Mfg. Ludlum Mfg. NA Date: 12/13/02 Time: Mfg. Ludlum Mfg. NA Date: 12/13/02 Time: Model 2929 Model Model 2929 Model Print name NA Serial # 147727 Serial # 105885 Serial # Date: 11/12/03 Cal Due Bkg. Serial # Print name Print name Sign MDA 205 dpm a MDA 205 dpm a MDA NA NA Print name Sign PRN/REN #: NA Survey performed following sludge removal. Survey results Survey results Survey results Swipe ## LOCATION/DESCRIPTION Swipe Opinicocm2 dpm/viocen2 dpm					-		- i			nval	····
Efficiency 33.5 % Efficiency 36.9 % Efficiency ▼ RWP #: 02-RISS MDA 18 dpm α MDA 18 dpm α MDA NA Mfg. Ludlum Mfg. Ludlum Mfg. NA Model 2929 Model NA Date: 12/13/02 Time: Scrial # 147727 Serial # 105885 Serial # NA					_					-	
MDA 18 dpm α MDA 18 dpm α MDA NA Date: 12/13/02 Time: Mfg. Ludium Mfg. Ludium Mfg. NA 205 dpm α MDA NA NA NA 205 dpm γ/00cm2 dpm γ/00cm2 dpm γ/00cm	· -		-		· · —	, 🔻	-	- NO 110		S 024	
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Mfg. Ludium Mfg. Ludium Mfg. NA Model 2929 Model 2929 Model NA Serial # 147727 Serial # 105885 Serial # NA Bkg. 56.0 cpmβ Bkg. 59.2 cpmβ Bkg. RCT: NA I MDA 205 dpmα MDA 205 dpmα MDA NA NA Print name Sign SURVEY RESULTS SURVEY RESULTS Survey performed following sludge removal. SURVEY RESULTS SWipe Direct Wipe Swipe 4 Process Print name Sign 5Wipe Direct Wipe Swipe 4 Print name Sign 5 Print name Sign 5 Print name Sign 6 Print name Sign 6 Print name Sign 6 Print name Sign	MDA _	10 арт а	WIDA	10 apm α	MDA	INA	Datas	40/40/00) Timo.	100	20
Model 2929 Model 2929 Model	N/f~	Ludlum	Mf~	مسريال سم	N.CC.	NIA	Date: —	12/13/02	r mie:	100	JU
Serial # 147727 Serial # 2/12/03 Cal Due 2/26/03 RCT: NA / NA Print name 3 Sign MDA 205 dpm α MDA 205 dpm α MDA NA Print name 3 Sign MDA NA Print name 3 Sig	_					NA .					
Cal Due 3/26/03 Cal Due Bkg. 56.0 cpm β Bkg. 59.2 cpm β Bkg. Print name Na Na Efficiency 42.9 % Efficiency 38.3 % Efficiency NA Print name Sign CRN/REN #: NA Survey performed following sludge removal. SURVEY RESULTS Swipe Direct Wipe Swipe 4 Floor 2046 NA NA <205					_		-				
Bkg. 56.0 cpm β lefticiency 42.9 % lefticiency 38.3 % lefticiency Efficiency NA In Print name Sign MDA 205 dpm α MDA 205 dpm α MDA NA NA Print name Sign PRN/REN # : NA Comments: Survey performed following sludge removal. SURVEY RESULTS Swipe ALPHA left with the print of the											
Efficiency 42.9 % MDA 205 dpm α Efficiency MDA NA Print name Sign SURVEY RESULTS Swipe ## LOCATION/DESCRIPTION ALPHA Swipe Direct Wipe Swipe dpm/100cm2 dp					_		-		1	. 1	
MDA 205 dpm α MDA NA SURVEY RESULTS Swipe ALPHA Direct Wipe Swipe # LOCATION/DESCRIPTION ALPHA Swipe Direct Wipe Swipe dpm/100cm2										NA /	NA
Survey performed following sludge removal. Survey performed following sludge removal.			-	38.3 %	-	/ <u> </u>	P	rint name	: Sig	nature	Emp.
Survey performed following sludge removal. Survey RESULTS	MDA_	205 dpm α	MDA	205 dpm α	MDA	NA	_				
BWIPE LOCATION/DESCRIPTION Swipe Direct Wipe Swipe 1 Floor 2046 NA NA <205 2 Floor 1773 <205 3 Floor 2532 <205 4 Floor 2148 <205 5 Floor 3063 <205 6 Floor 1440 <205 7 Floor 1428 <205 8 Floor 1515 <205 9 Floor 2625 <205 10 Floor 2994 <205 11 Floor 1839 <205 12 Floor 1965 <205 13 Floor 2163 <205 14 Floor 1959 < <205 15 Floor 1959 <					SURVE	Y RESUL					
# LOCATION/DESCRIPTION Swipe Direct Wipe Swipe dpm/100cm2 dpm/10cm2 dpm/100cm2 dpm/100cm2 dpm/100cm2 dpm/100cm2 dpm/10cm2 dpm/100cm2 dpm/10cm2 dpm/10cm2	Swipe						<u>ALPHA</u>			<u>BETA</u>	
1 Floor 2046 NA NA <205		LOC	ATION/DE	SCRIPTION	1	Swipe		T	 	Direct	Wipe
2 Floor 1773 <205			Floa							dpm/100cm2	dpm/wip
3 Floor 2532 <205							I NA	I NA		NA_	NA
4 Floor 2148 <205							 				
5 Floor 3063 <205		·									
7 Floor 1428 <205							 				
8 Floor 1515 <205	6		Floc	or		1440			<205		
9 Floor 2625 <205	7		Floo	or		1428			<205		
10 Floor 2994 <205											
11 Floor 1839 <205									<u> </u>		
12 Floor 1965 <205										 	-
13 Floor 2163 <205							 	 	<u> </u>		-
14 Floor 4773 <205							 				
15 Floor 1959 <205							 				
16 Floor 2400 <205							 	 			
18 Floor 2118 <205											
19 Floor 2055 ▼ ▼ < 205	17		Floo	or		3741			<205		
20 Floor 2211 NA NA 205	19 l		Floo	or				₩		*	▼ NA
										NA	



	-	INSTRUM	ENT DATA						
Mfg.	Ludlum	Mfg.	Ludlum	Mfg. N	IE Electra	Survey typ	e: Contaminat	ion	
Model	2929	Model	2929	Model	DP-6	Building:	207 Tank	_	
Serial #	147727	Serial #	NA NA	Serial #	3252	Location:	Inside Tank		
Cal Due	1/12/03	Cal Due	NA	Cal Due	2/6/03	Purpose:	Characterizati	on	
Bkg.	0.5 cpm α	Bkg.	NA cpm α	Bkg.	6 cpm α	Prior	to fixat	ive	
Efficienc	y 33.5 %	Efficiency	/ NA %	Efficiency	21.8 %	RWP#:	02	-RISS-024	
MDA	18 dpm α	MDA	18 dpm α	MDA	65 dpm α]		•	·
						Date:	12/24/02 T	ime:	1100
Mfg.	Ludlum	Mfg.	Ludlum	Mfg. N	IE Electra				
Model	2929	Model	2929	Model	DP-6	RO			
Serial #	147727	Serial #	NA	Serial #	3252				
Cal Due	1/12/03	Cal Due	NA	Cal Due	2/6/03				
Bkg.	58.7 cpm β	Bkg.	NA cpm β	Bkg.	431 cpm β	RC			
Efficienc	y 42.9 %	Efficiency	/ NA %	Efficiency	31.6 %				
MDA	205 dpm α	MDA	205 dpm α	MDA	314 dpm β				

PRN/REN # : NA
Comments: NA

SURVEY RESULTS

Swipe			ALPHA			BETA	
#	LOCATION/DESCRIPTION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Floor NW Quadrant	715	65400	2	<205	4290	NA
2	Floor NW Quadrant	492	66000		<205	3894	
3	Floor NW Quadrant	328	53526		<205	3444	
4	Floor NW Quadrant	234	75000		<205	3126	
5	Floor NW Quadrant	415	19200		<205	4491	
6	Floor SW Quadrant	203	34038		<205	6003	
7	Floor SW Quadrant	227	63100		<205	16800	
8	Floor SW Quadrant	285	66000		<205	7980	
9	Floor SW Quadrant	199	138000		<205	3990	
10	Floor SW Quadrant	334	168000		<205	4560	
11	Floor SE Quadrant	198	84000		<205	4029	
12	Floor SE Quadrant	394	90000		<205	3240	
13	Floor SE Quadrant	184	114000		<205	4269	
14	Floor SE Quadrant	271	126000		<205	3600	
15	Floor SE Quadrant	207	78000		<205	3102	
16	Floor NE Quadrant	469	72000		<205	4329	
17	Floor NE Quadrant	350	150000		<205	4887	
18	Floor NE Quadrant	229	51000		<205	3060	
19	Floor NE Quadrant	311	66000		<205	3618	
20	Floor NE Quadrant	340	90000	Mo	<205	4122	JA

Date Reviewed: 27-02 RS Supervisio

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

SURVEY RESULTS

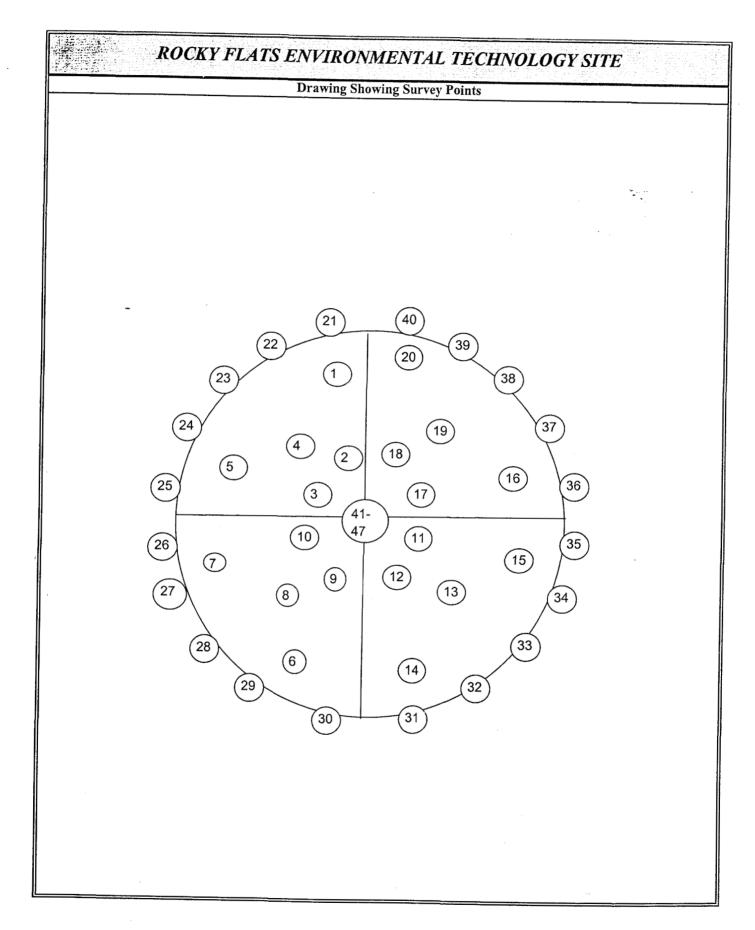
		•	ALPHA			BETA	
Swipe	LOCATION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
#		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
21	3 foot up to interior wall	<65	4320	NA	<205	2100	NA
22	3 foot up to interior wall	<65	2466		<205	2079	
23	3 foot up to interior wall	<65	7229		<205	2760	
24	3 foot up to interior wall	<65	9366		<205	1545	
25	3 foot up to interior wall	<65	4868		<205	1551	
26	3 foot up to interior wall	<65	6120		<205	1881	
27	3 foot up to interior wall	<65	4680		<205	1614	
28	3 foot up to interior wall	<65	1260		<205	1899	
29	3 foot up to interior wall	<65	4686		<205	2037	
30	3 foot up to interior wall	78	7380		<205	2349	
31	7 foot up to interior wall	1259	132		<205	1500	
32	7 foot up to interior wall	<65	108		<205	1368	
33	7 foot up to interior wall	<65	228		<205	1854	
34	7 foot up to interior wall	<65	378		<205	2106	
35	7 foot up to interior wall	<65	2160		<205	2772	
36	7 foot up to interior wall	<65	3072		<205	2100	
37	7 foot up to interior wall	<65	2478		<205	1686	
38	7 foot up to interior wall	<65	2316		<205	1476	
39	7 foot up to interior wall	<65	1746		<205	1728	
40	7 foot up to interior wall	<65	4008		<205	2169	
41	Center	107	150000		<205	NA	
42	Center	203	90000		<205		
43	Center	192	90000		<205		
44	Center	278	60000		<205		
45	Center	114	10000		<205		
46	Center	101	15000		<205		
47	Center	95	50000		<205		
48 49	NA	NA	NA		NA		
50							
51							· ·
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63		NA NA	NA NA	NA	NA NA	NA NA	NA
	<u> </u>	INA	NA	INA	INA	IN/A	1374

ROCKY FLATS ENVIRONMENTAL VECHNOLOGY SIVE

Drawing Showing Survey Points

3-PRO-164-RSP-07.01 (effective 7/12/01)

Page 2 of 3



ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE INSTRUMENT DATA Mfg. Ludlum Mfg. Mfg. Survey type: Contamination NA Model 2929 Model Model Building: T207 Serial # Serial # 109534 Serial # Location: T207 Cal Due 3/30/03 Cal Due Cal Due Purpose: Tank Survey Prior to Demolition Bkg. 0.3 cpm α Bkg. But after applying fixative Bkg. Efficiency 34.5 % Efficiency RWP#: Efficiency 03-RISS-011 MDA 18 dpm α MDA NA MDA NA 3/3/03 Time: 1400 Date: Mfg. Ludlum Mfg. Mfg. NA Model 2929 Model RCT Model Serial # 109534 Serial # Serial # Cal Due 3/30/03 Cal Due Cal Due 73.6 cpm β Bkg. Bkg. Bkg. RCT Efficiency 38.8 % Efficiency Efficiency **MDA** 205 dpm β **MDA** NA **MDA** NA

PRN/REN#: NA

Comments: Tank to remain posted as CA during demolition.

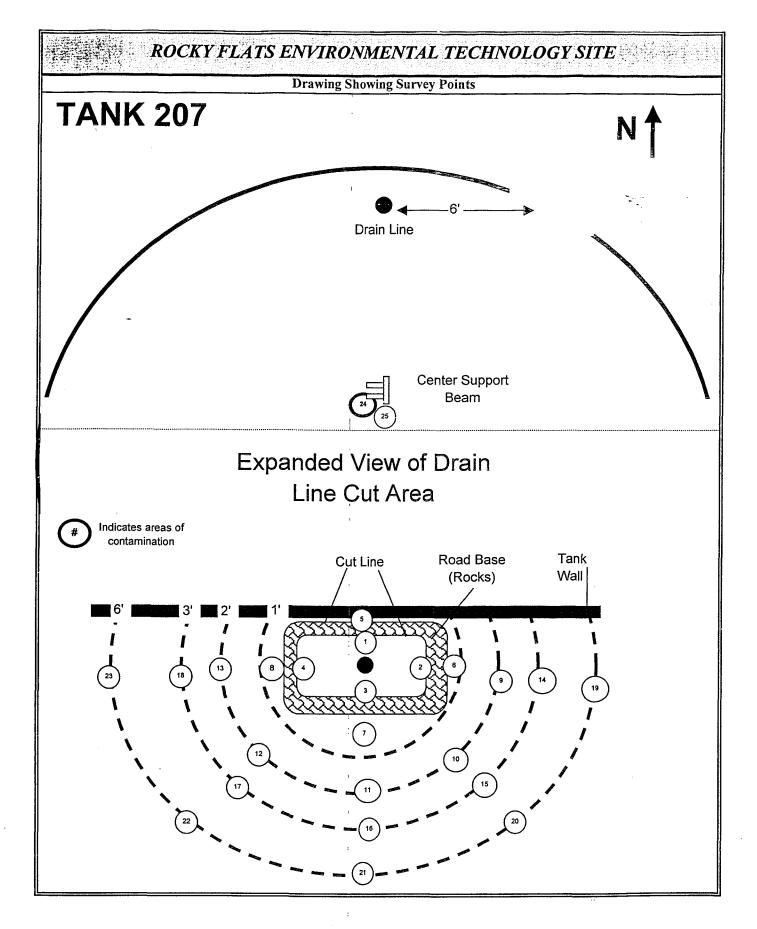
SURVEY RESULTS

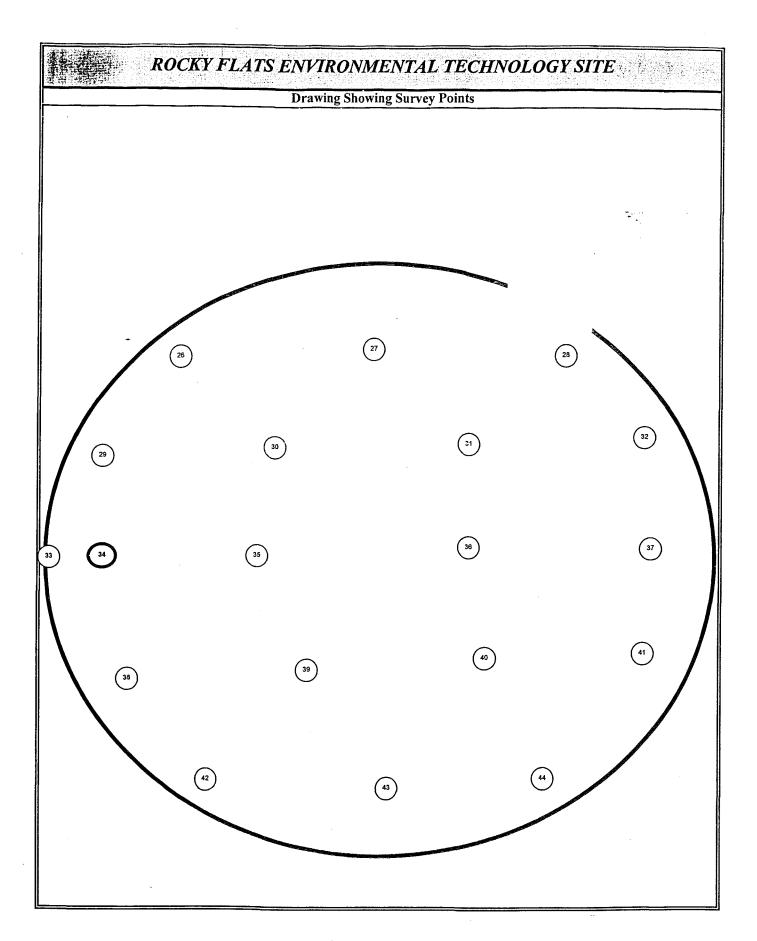
Swipe			ALPHA			BETA	
#	LOCATION/DESCRIPTION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Floor ,	<18	NA	NA	<205	NA	NA
2	Floor	<18			<205		
3	Floor	<18			<205		
4	Floor	<18			<205		
5	Floor	<18			<205		
6	Floor	<18			<205		
7	Floor	<18			<205		
8	Floor	<18			<205		
9	Floor	<18			<205		
10	Floor	<18			<205		
11	Floor	<18			<205		
12	Floor	<18			<205		
13	Floor	<18			<205		
14	Floor	<18			<205		
15	Floor	<18			<205		
16	Floor	<18			<205		
17	Floor	<18			<205		
18	Floor	<18			<205		
19	Floor	<18	+		<205	—	—
20	Floor	<18	NA	ŇA	<205	NA	NA
Date Review	ved: <u>\(\frac{1}{2} \tag{1} \text{03} \) RS Supervision:</u>	(FE)				1	
		Frint Namo			Signature		Emp. #

3-PRO-164-RSP-07.01 (effective 7/12/01)

Signature Emp. # Page 1 of 4

维含"。 ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE **SURVEY RESULTS ALPHA BETA** Swipe LOCATION Swipe Direct Wipe Swipe Direct Wipe # dpm/wipe | dpm/100cm2 dpm/100cm2 | dpm/100cm2 dpm/100cm2 dpm/wipe 21 Floor <18 NA NA <205 NA NA 22 Floor <18 <205 23 Floor <18 <205 24 Side of Center Support Beam (Bottom) 27 <205 25 Floor <18 <205 26 Floor <18 <205 27 Floor <205 <18 28 Floor <18 <205 29 Floor <18 <205 30 Floor <18 <205 31 Floor <18 <205 32 Floor <18 <205 33 Manway Horizontal <18 <205 34 Floor 27 <205 35 Floor <205 <18 36 Floor <18 <205 37 Floor <18 <205 38 Floor <18 <205 39 Floor <18 <205 40 Floor <205 <18 41 Floor <18 <205 42 Floor <18 <205 43 Floor <205 <18 44 Floor <18 <205 NA NA





Industrial Hygiene Information System

IHISR_SAMPLE_RESULTS_REPORT

Sample Results Report

Page:

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SURFACE	
207 - PRE Besurveys	
Date: 05/02/2003	

	a	04)W , /					
Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
<i>КН</i> HIEBERT, DOUG G							
TANK 207-04282003-00-101		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-102		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-103		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-104		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-105		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-106		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-107		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-108		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-109		INSIDE	SHEAR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-110				BLANK	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04282003-00-111		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-112		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-113		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-114		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-115		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-116		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-117		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-118		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

IHISR_SAMPLE_RESULTS_REPORT Date: 05/02/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

Page:

Concentration
Analyte
Rin No
Туре
Location
Room
Work Pkg
Sample Number

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
<i>KH</i> HIEBERT, DOUG G							
TANK 207-04282003-00-119		INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-120				BLANK	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04292003-00-121		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-122		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-123		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-124		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-125		INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-126		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-127		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-128		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-129		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-130		INSIDE	SHEAR INSIDE CAB	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-131		INSIDE	ON INTERMODAL 001036 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-132		INSIDE	ON INTERMODAL 001036 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-133		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-134		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-135		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-136		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING

IHISR_SAMPLE_

		Page:	
Industrial Hygiene Information System	Sample Besults Benort	Cample Results Report	SURFACE
Ć	IHISR_SAMPLE_RESULTS_REPORT	Date: 05/02/2003	

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
<i>KH</i> HIEBERT, DOUG G							
TANK 207-05012003-00-137	Z	INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-138	<u>Z</u>	INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-139	Z	INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-140	Ž	INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-141	Ž	INSIDE	ON INTERMODAL 001030 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-142	Ž	INSIDE	ON INTERMODAL 001030 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-143	Ž	INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-144	Ž	INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-145	Ž	INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-146	Ž	INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-147	Z	INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-148	Ž	INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-149	Ž	INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-150	Ž	INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-151	Z	INSIDE	ON INTERMODAL 001039 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-152	<u>Z</u>	INSIDE	ON INTERMODAL 001039 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-153	Z	INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-154	Z	INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING

121

IHISR_SAMPLE_RESULTS_REPORT

IHISK_SAMPLE_RESUL Date: 05/02/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

4 of 19

Page:

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
KH HIEBERT, DOUG G							
TANK 207-05012003-00-155		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-156		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-157		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-158		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-159		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-160		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-161		INSIDE	ON INTERMODAL 001037 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-162		INSIDE	ON INTERMODAL 001037 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-163		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-164		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-165		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-166		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-167		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-168		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-169		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-170		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-171		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-172		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING

Date: 05/02/2003

Industrial Hygiene Information System Sample Results Report

5 of 19

Page:

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
КН							
нгевеят, роис с							
TANK 207-05012003-00-173		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-174		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-175		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-176		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-177		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-178		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-179		INSIDE	PROCESSOR IN CAB	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-180				BLANK	03Z1569	BERYLLIUM AND B	0.0000_
TANK 207-05012003-00-181		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-182		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-183		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-184		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-185		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-186		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-187		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-188		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-189		INSIDE	SHEAR IN CAB	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-190				BLANK	03Z1569	BERYLLIUM AND B	0.0000 _
Building Subtotal: 90	ototal: 90						

Building Subtotal: 90

123	IHISR_SAMPLE_RESULTS_REPORT	Date: 05/02/2003

SURFACE

6 of 19

Page:

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration	
КН								
HIEBERT, DOUG G								
Hygienist Subtotal: 90	ubtotal: 90							
Company Subtotal: 90	ubtotal: 90							
<i>RFCSS</i> HOLWAGER, LEEANN								
/TANK 207-02132003-01-001	SNI	INSIDE	FLOOR BY DRAIN	WIPE	03Z0320	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
TANK 207-02132003-01-002	<u> </u>	INSIDE	BASE OF CENTER POLE	WIPE	03Z0920	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
TANK 207-02132003-01-003	SNI	INSIDE	PORTAL OPENING FOR AIRMOVER	WIPE	03Z0920	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
J TANK 207-02132003-01-004	SNI	INSIDE	FLOOR - SOUTH SECTION	WIPE	03Z0920	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
TANK 207-02132003-01-005	SNI	INSIDE	FLOOR - EAST SECTION	WIPE	03Z0320	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
TANK 207-02132003-01-006	SNI	INSIDE	FLOOR - NORTH SECTION	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
TANK 207-02132003-01-007	SNI	INSIDE	FLOOR - WEST SECTION	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
ર્પું TANK 207-02132003-01-008	Ţ	TENT	FLOOR - INSIDE PEN BY EXIT POINT WIPE OF TANK	WIPE	03Z0920	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	E
TANK 207-02132003-01-009	1	TENT	FLOOR - INSIDE PEN BY EXIT POINT WIPE OF PEN	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	The Trans
TANK 207-02132003-01-010	SNI	INSIDE	UNDER I-BEAM AT BASE OF CENTER POLE	WIPE	03Z0320	BERYLLIUM AND B	0.1890_UG/100CM2	10 Contract 10 Con
TANK 207-02132003-01-011				BLANK	03Z0320	BERYLLIUM AND B	< 0.1000 _ UG	Do ac , Sest
TANK 207-02172003-01-001	NI NI	INSIDE	UNDER I-BEAM AT BASE OF CENTER POLE	WIPE	0320920	BERYLLIUM AND B	ND B < 0.1000 _ UG/100CMZ) 500 1 100 100 100	Ser Second
TANK 207-02172003-01-002	Z	INSIDE	UNDER I-BEAM AT BASE OF CENTER POLE	WIPE	03Z0920	BERYLLIUM AND B	< 0.1000 _ UG/100CM2 <	
TANK 207-02172003-01-003	NI NI	INSIDE	ON CENTER POLE	WIPE	03Z0320	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	ф _а
TANK 207-02172003-01-004	Z	INSIDE	PORTAL OPENING FOR AIR MOVER WIPE	WIPE	03Z0920	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
7								

Date: 05/02/2003

SURFACE

7 of 19

Page:

< 0.1000 _ UG/100CM2 0.2730 _ UG/100CM2 Concentration < 0.1000 _ UG BERYLLIUM AND B **BERYLLIUM AND B** BERYLLIUM AND B BERYLLIUM AND B BERYLLIUM AND B 03Z0950 03Z0920 0320950 03Z0950 03Z0950 03Z0950 **Rin No** BLANK WIPE WIPE WIPE WIPE WIPE WIPE WIPE EXTERNAL SURFACES OF LOW-VOL WIPE AIR SAMPLER WIPE WIPE HIGH-VOL AIR SAMPLER - EXHAUST WIPE AND EXTERNAL SURFAC CORD FOR LOW-VOL AIR SAMPLER WIPE HIGH-VOL AIR SAMPLER - ON FEET AND LEGS FLOOR WHERE LADDER WAS CUT FLOOR - NORTH SECTION JUST INFRONT OF DOOR AIR INTAKE TO LOW-VOL AIR **DEWALT SAW - EXTERNAL** DEWALT SAW - CUTTING FLOOR - EAST SECTION ON FLOOR BY EXIT ON EAST TABLE WEST TABLE HEAD/FOOT SURFACES ON STOOL INSIDE INSIDE TENT Work Pkg TANK 207-02182003-01-015 TANK 207-02182003-01-018 TANK 207-02182003-01-019 TANK 207-02182003-01-016 TANK 207-02172003-01-006 TANK 207-02172003-01-007 TANK 207-02172003-01-010 TANK 207-02182003-01-012 TANK 207-02182003-01-013 TANK 207-02172003-01-005 TANK 207-02172003-01-008 TANK 207-02172003-01-009 TANK 207-02182003-01-011 TANK 207-02182003-01-014 TANK 207-02182003-01-017 HOLWAGER, LEEANN Sample Number **RFCSS**

BERYLLIUM AND B < 0.1000 UG/100CM2

03Z1026

WIPE

FLOOR - BY DRAIN

INSIDE

INSIDE

TANK 207-02252003-01-011

TANK 207-02182003-01-020

TANK 207-02252003-01-012

< 0.1000 __ UG/100CM2

< 0.1000 _ UG

BERYLLIUM AND B

03Z0950

BLANK

03Z1026

WIPE

FLOOR - APPROX. 5 FOOT SOUTH

Date: 05/02/2003

Industrial Hygiene Information System Sample Results Report

8 of 19

Page:

SURFACE

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
RFCSS HOLWAGER, LEEANN							
/TANK 207-02252003-01-013		INSIDE	FLOOR - ON CUT EDGE	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
/ TANK 207-02252003-01-014		INSIDE	FLOOR - APPROX. 2 FEET SOUTH WEST OF CUT AREA	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-015		INSIDE	FLOOR - APPROX5 FOOT NORTH OF CUT AREA, BY WALL	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-016		INSIDE	FLOOR - APPROX. 3 FEET EAST OF CUT AREA	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-017		INSIDE	FLOOR - APPROX. 4 FEET WEST OF CUT AREA	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-018		INSIDE	FLANGED OPENING BY AIR MOVER	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-019		INSIDE	FACE OF PLATE BY AIR MOVER	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-020				BLANK	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-02252003-01-021		TENT	EXTERNAL SURFACES OF DEWALT DRILL	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-022		TENT	EXTERNAL SURFACES OF MILWAULKEE DRILL	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-023		TENT	EXTERNAL SURFACES OF LOW VOLUME AIR SAMPLER #95172	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-024		TENT	EXTERNAL SURFACES OF LOW VOLUME AIR SAMPLER #96066	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-025				BLANK	03Z1026	BERYLLIUM AND B	< 0.1000 UG
TANK 207-02272003-01-001		TENT	EXTERNAL SURFACES OF LOW VOLUME AIR SAMPLER #96081	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-002		TENT	CORD TO LOW VOLUME AIR SAMPLER #96081	WIPE	03Z1074	BERYLLIUM AND B	0.1700UG/100CM2
TANK 207-02272003-01-003		TENT	EXTENTION CORD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-004		TENT	EXTENTION CORD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-005		TENT	TANK SIDE OF DOOR FLAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

126

IHISR_SAMPLE_RESULTS_REPORT Date: 05/02/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

Page:

Analyte Concentration	
Analyte	
Rin No	
Type	
Location	
Room	
Work Pkg	
Sample Number	RFCSS

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<i>RFCSS</i> HOLWAGER, LEEANN							
TANK 207-02272003-01-006		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-007		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-008		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-009		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-010		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-011		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-012		TENT	NIBBLER CUTTING HEAD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-013		TENT	EXTERNAL SURFACES OF NIBBLER	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-014		TENT	NIBBLER CORD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-015		TENT	ULTRA MAX 695 AEROSOL GENERATOR - WHEELS	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-016		TENT	ULTRA MAX 695 AEROSOL GENERATOR - EXTERNAL SURFACE	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-017		TENT	ULTRA MAX 695 AEROSOL GENERATOR - CORD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-018				BLANK	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-02272003-01-019				BLANK	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11042002-01-101		CARGO	ON THE CUTTING AREA OF THE ELECTRIC SAWSALL	WIPE	03Z0034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-102		CARGO	ON THE HANDLE, TRIGGER & CORD OF ELECTRIC SAWSALL	WIPE	03Z0034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-103		CARGO	ON 5-C CLAMPS	WIPE	03Z0034	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-11042002-01-104		CARGO	ON THE MISC TOOLS LOCATED IN THE BAG WITH THE ELEC	WIPE	03Z0034	BERYLLIUM AND B	< 0.0500 _ UG/100CM2

Date: 05/02/20

Industrial Hygiene Information System

Page:	,
Sample Results Report	SURFACE
IPLE_RESULTS_REPORT 92003	

Sample Number	Work Pkg	Room	Location	Туре	Rin No †	Analyte	Concentration
RFCSS HOLWAGER, LEEANN							
TANK 207-11042002-01-105		CARGO	ON THE CUTTING AREA OF THE NIBBLER	WIPE	03Z0034	BERYLLIUM AND B	0.3960_UG/100CM2
TANK 207-11042002-01-106		CARGO	ON THE HANDLES, TRIGGER & CORD OF NIBBLER	WIPE	03Z0034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-107		CARGO	ON THE CUTTING AREA OF THE PORTABLE SAWSALL	WIPE	03Z0034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-108		CARGO	ON THE HANDLE, TRIGGER & 2 SAWSALL BATTERY PACKS	WIPE	03Z0034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-109		CARGO	ON THE PORTABLE DRILL	WIPE	03Z0034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-110				BLANK	03Z0034	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11072002-01-111		TENT	INSIDE PEN IN HCA FLOOR	WIPE	03Z0299	BERYLLIUM AND B	0.1210_UG/100CM2
TANK 207-11072002-01-112		TENT	FLOOR AT STEP OFF PAD FOR HCA	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-113		TENT	FLOOR INSIDE CA	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-114		TENT	ON EARL LOLLIS' SCBA MASK	WIPE	03Z0Z99	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-115		TENT	ON RICKY MOTES' SCBA MASK	WIPE	03Z0Z88	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-116		TENT	ON SCOTT MAHONEYS' SCBA MASK	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-117		TENT	ON JAMES SMITHS' SCBA MASK	WIPE	03Z0Z88	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-118		TENT	ON FLOOR IN RBA	WIPE	03Z0Z88	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-119		TENT	ON FLOOR IN RIMA	WIPE	03Z0Z88	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-120				BLANK	03Z0Z99	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11142002-01-121		TENT	ON RICKY MOTES' SCBA MASK	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-122		TENT	ON SCOTT MAHONEYS' SCBA MASK WIPE	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

IHISR_SAMPLE_RESULTS_REPORT Date: 05/02/2003

Industrial Hygiene Information System Sample Results Report

Page: 11 of 19

SURFACE

Sample Number	Work Pkg	Room	Location	Туре	Rin No +	Analyte	Concentration
<i>RFCSS</i> HOLWAGER, LEEANN							
TANK 207-11142002-01-123		TENT	ON EARL LOLLIS' SCBA MASK	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-124		TENT	ON JAY BARNES' SCBA MASK	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-125		TENT	FLOOR OF HCA PEN	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-126		TENT	FLOOR OF HCA STEP OFF PAD	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-127		TENT	FLOOR OF CA BAG STORAGE AREA	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-128		TENT	FLOOR OF RBA STEP OFF PAD	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-129		TENT	FLOOR IN RMA	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-130				BLANK	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11202002-01-101		INSIDE	GREG ROHER SCBA MASK	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-102		TENT	FLOOR IN HCA PEN	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-103		TENT	FLOOR @HCA STEP OFF PAD	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-104		TENT	FLOOR IN CA WHERE SLUDGE BAGS STAGED	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-105		TENT	FLOOR IN RBA	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-106		TENT	FLOOR IN RMA	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-107		TENT	ON 3 OF THE SCBA TANKS	WIPE	03Z0381	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-11212002-01-108		CARGO	ON RAD OPS COUNTING TABLE	WIPE	03Z0381	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-11212002-01-109		TRAILER	IN THE LUDLUM DUAL SCALER TRAYS AND ON TAB! F	WIPE	03Z0381	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-11212002-01-110		TRAILER	IN THE SAC-4 TRAYS	WIPE	03Z0381	BERYLLIUM AND B	< 0.0500 _ UG/100CM2

Date: 05/02/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

Page: 12 of 19

...

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
RFCSS HOLWAGER, LEEANN							
TANK 207-11212002-01-111				BLANK	03Z0381	BERYLLIUM AND B	< 0.1000 UG
TANK 207-11262002-01-112		TENT	HCA STEP OFF PAD-FLOOR	WIPE	0320434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-113		TENT	CA-FLOOR	WIPE	0320434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-114		TENT	RBA- FLOOR	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-115		TENT	RMA- FLOOR	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-116		CARGO	ON SURVEY TABLE	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-117		TRAILER	ON ELECTRAS AND 12-1A'S	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-118		TRAILER	INSIDE TRAYS OF SAC-4'S AND ON TABLE	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-119		TRAILER	INSIDE LUDLUM DUAL SCALER TRAYS	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-120		TRAILER		BLANK	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11262002-01-121		TENT	HCA PEN ON FLOOR	WIPE	03Z0434	BERYLLIUM AND B	0.1760 _ UG/100CM2
TANK 207-12052002-01-101		TENT	SCBA HARNESS #1, IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-102		TENT	SCBA HARNESS #2, IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-103		TENT	SCBA HARNESS #3, IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-104		TENT	FLOOR IN CA WHERE THERE WAS A SPILL OF SLUDGE	WIPE	03Z0268	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-105		TENT	FLOOR IN HCA PEN	WIPE	03Z0568	BERYLLIUM AND B	0.1520 _ UG/100CM2
TANK 207-12052002-01-106		TENT	FLOOR AT HCA STEP OFF PAD	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-107		TENT	FLOOR IN CA, NORTH EAST CORNER WHERE BAGS STAGED	WIPE	03Z0268	BERYLLIUM AND B	10.2000UG/100CM2

Date: 05/02/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

13 of 19

Page:

22,9000 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.0500 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.0500 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.0500 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.0500 _ UG/100CM2 < 0.0500 _ UG/100CM2 < 0.0500 _ UG/100CM2 < 0.0500 _ UG/100CM2 8.5300 _ UG/100CM2 Concentration < 0.1000 _ UG < 0.1000 _ UG BERYLLIUM AND B **BERYLLIUM AND B** BERYLLIUM AND B BERYLLIUM AND B **BERYLLIUM AND B** BERYLLIUM AND B BERYLLIUM AND B BERYLLIUM AND B 03Z0568 03Z0588 03Z0588 03Z0568 BLANK BLANK WIPE INSIDE 2 LUDLUM DUAL SCALER ON AIR SAMPLE PUMPS AND FLOOR IN CA, NORTH EAST CORNER AFTER DECON SCBA HARNESS #5, IN RMA SCBA HARNESS #4, IN RMA SCBA HARNESS #6, IN RMA INSIDE 3 SAC-4 TRAYS Location ON 3 LUDLUM 12-1AS ON SURVEY TABLE ON SURVEY CART FLOOR-SEE MAP FLOOR-SEE MAP ON PAPR BELTS ON 3 ELECTRAS FLOOR IN RMA FLOOR IN RBA TRAILER TRAILER TRAILER TRAILER TRAILER CARGO INSIDE CARGO CARGO INSIDE TENT TENT TENT TENT TENT TANK 207-12052002-01-110 TANK 207-12052002-01-116 TANK 207-12052002-01-119 TANK 207-12052002-01-123 TANK 207-12112002-01-102 TANK 207-12052002-01-109 TANK 207-12052002-01-113 TANK 207-12052002-01-118 TANK 207-12052002-01-120 TANK 207-12052002-01-122 TANK 207-12052002-01-108 TANK 207-12052002-01-111 TANK 207-12052002-01-112 TANK 207-12052002-01-114 TANK 207-12052002-01-115 TANK 207-12052002-01-117 TANK 207-12052002-01-121 TANK 207-12112002-01-101 HOLWAGER, LEEANN Sample Number

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Page:

14 of 19

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
RFCSS HOLWAGER, LEEANN							
X TANK 207-12112002-01-103		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	7.1300 _ UG/100⊡M2
) TANK 207-12112002-01-104		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	10.4000 _ UG/100CM2
TANK 207-12112002-01-105		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	1.4700 _ UG/100CM2
TANK 207-12112002-01-106		INSIDE	FLOOR-SEE MAP	WIPE	03Z0288	BERYLLIUM AND B	2.7@0 _ UG/100CM2
TANK 207-12112002-01-107		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	3.230C_UG/100CM2
TANK 207-12112002-01-108		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	2.6000 _ UG/100CM2
TANK 207-12112002-01-109		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	25.5000 UG/100CM2
TANK 207-12112002-01-110		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	4.6200 _ UG/100CM2
TANK 207-12112002-01-111		INSIDE	FLOOR I BEAM INTERFACE SEAM- CENTER POLE	WIPE	03Z0588	BERYLLIUM AND B	8 9300 _ UG/100CM2
TANK 207-12112002-01-112		INSIDE	ON TOP OF IBEAMI@ BASE OF CENTER POLE	WIPE	03Z0588	BERYLLIUM AND B	1.9500 _ UG/100CM2
TANK 207-12112002-01-113		INSIDE	ON THE CENTER POLE	WIPE	03Z0588	BERYLLIUM AND B	0.3840 _ UG/100CM2
TANK 207-12112002-01-114		INSIDE	INSIDE DRAIN	WIPE	03Z0588	BERYLLIUM AND B	1.8780_UG/100CM2
TANK 207-12112002-01-115		INSIDE	ON WALL WEST OF DOOR, APPROX 3 FEET FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12112002-01-116		INSIDE	AROUND THE PORT OPENING FOR THE AIRMOVER	WIPE	03Z0588	BERYLLIUM AND B	0.1150UG/100CM2
TANK 207-12112002-01-117		INSIDE	ON WALL SOUTH OF AIRMOVER, APPROX 3 FT FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12112002-01-118		INSIDE	ON SOUTH WALL, APPROX 0.5 FEET FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	0.4290 _ UG/100CM2
TANK 207-12112002-01-119		INSIDE	ON EAST WALL, APPROX 3 FEET FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	0.4830 _ UG/100CM2
TANK 207-12112002-01-120		INSIDE	ON WALL EAST DOOR, APPROX 0.5 FEET FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	0.5300 _ UG/100CM2

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/02/2003

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	Date: 05/02/2003			Sample Results Report	urs Repor	–		Page:	15 of 19
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מרים נו	는 당 선 전 전 문 Sample Number Wo	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration	
-1300	HFCSS								
9 5	HOLWAGER, LEEANN								
डचर [/]	TANK 207-12112002-01-121				BLANK	03Z0288	BERYLLIUM AND B	< 0.1000 _ UG	
.	TANK 207-12112002-01-122				BLANK	03Z0288	BERYLLIUM AND B	< 0.1000 _ UG	
3-19	Building Subtotal: 161	161							
け	I	161							
\cap	Company Subtotal: 161	161							
1-5	RTG								
Λô	SMITH, COLBY M								
n l	fANK 207-02212003-213-101		INSIDE	AT EDGES OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
うみへし	TANK 207-02212003-213-102		INSIDE	IN AREA WHERE FINES FROM CUTTING ARE LOCATED	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
7253	TANK 207-02212003-213-103		INSIDE	UNDERSIDE OF CENTER I BEAM, NE SIDE	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
93	TANK 207-02212003-213-104		INSIDE	UNDERSIDE OF CENTER I BEAM, BASE	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
← ‡	TANK 207-02212003-213-105		INSIDE	EAST OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
894	TANK 207-02212003-213-106		INSIDE	SOUTH OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
7	TANK 207-02212003-213-107		INSIDE	AT ENTRY AREA TO TANK FROM TENT	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02212003-213-108		INSIDE	WEST OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02212003-213-109		INSIDE	CENTER OF WORK AREA	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02212003-213-110		INSIDE	NORTH OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02212003-213-111		TENT	SOUTH END NEAR TANK ENTRY	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02212003-213-112		TENT	SOUTH END NEAR TANK ENTRY	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	

Date: 05/02/2003

Industrial Hygiene Information System Sample Results Report

16 of 19

Page:

SURFACE

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
<i>RTG</i> SMITH, COLBY M							
TANK 207-02212003-213-113		TENT	MIDDLE OF ROOM	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-114		TENT	NORTH END NEAR TANK ENTRY	WIPE	0320970	BERYLLIUM AND B	0.1180_UG/100CM2
TANK 207-02212003-213-115		TENT	IN BUFFER AREA, STEPOFF PAD/CENTER OF ROOM	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-116		TENT	IN BUFFER AREA, CENTER OF ROOM	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-117		TENT	ON ULTREX 695	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-118		TENT	ON HIGH VOL SAMPLER - CORD/BASE/HOUSING	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-119		TENT	ON LOW VOL SAMPLER - CORD/BASE/HOUSING	WIPE	03Z0970	BERYLLIUM AND B	0.2540 _ UG/100CM2
TANK 207-02212003-213-120				BLANK	0320970	BERYLLIUM AND B	< 0.1000 _ UG
Suilding S	Building Subtotal: 20						
Hygienist Subtotal: 20	ubtotal: 20						
Company Subtotal: 20	ubtotal: 20						
<i>SSOC</i> SIMPSON, MARK W							
TANK 207-01282003-23-002		TENT	FLOOR SE CORNER OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-003		TENT	FLOOR SW CORNER OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-004		TENT	FLOOR MIDDLE EAST SIDE OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-005		TENT	FLOOR MIDDLE WEST SIDE OF HCA	A WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-006		TENT	FLOOR NE CORNER OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-007		TENT	FLOOR NW CORNER OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

SURFACE

17 of 19

< 0.1000 _ UG/100CM2 Concentration BERYLLIUM AND B 03Z0852 03Z0852 03Z0852 03Z0852 03Z0852 03Z0852 03Z0852 33Z0852 03Z0852 03Z0852 03Z0852 03Z0852 03Z0831 03Z0831 03Z0852 03Z0852 Rin No WIPE WIPE WIPE Type WIPE WALL AREA WEST, ABOVE 8 FOOT - WIPE ROOF AREA EAST BEAM- TOP SIDE ROOF AREA SOUTH BEAM- TOP OF ROOF AREA NORTH BEAM-TOP OF ROOF AREA NORTH BEAM - BARE ROOF AREA SOUTH BEAM- BARE ROOF AREA WEST BEAM-TOP OF WALL AREA WEST, ABOVE 8 FT, UNDERNEATH CC FIXATIVE UNDERNEATH THE CC FIXATIVE UNDERNEATH THE CC FIXATIVE UNDERNEATH THE CC FIXATIVE ROOF AREA WEST BEAM- BARE ROOF AREA EAST BEAM- BARE UNDERNEATH OF CC FIXATIVE ON TOP OF TABLE NEAR WEST ON TOP OF TABLE NEAR EAST ON TOP OF TABLE NEAR EAST ROOF AREA SOUTH BEAM-ROOF AREA NORTH BEAM-ROOF AREA WEST BEAM-ROOF AREA EAST BEAM-Location TOP OF CC FIXATIVE THE CC FIXATIVE THE CC FIXATIVE OF CC-FIXATIVE CC FIXATIVE INSIDE TENT TENT TENT Work Pkg TANK 207-02032003-23-008 TANK 207-02032003-23-012 TANK 207-02032003-23-013 TANK 207-02032003-23-014 TANK 207-01282003-23-008 X TANK 207-01282003-23-009 TANK 207-01282003-23-010 TANK 207-02032003-23-002 TANK 207-02032003-23-003 TANK 207-02032003-23-005 TANK 207-02032003-23-006 TANK 207-02032003-23-007 TANK 207-02032003-23-009 TANK 207-02032003-23-010 TANK 207-02032003-23-011 TANK 207-02032003-23-004 TANK 207-02032003-23-001 SIMPSON, MARK W Sample Number SSOC

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/02/2003

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	IHISR_SAMPLE_RESULTS_REPORT	EPORT		Industrial Hygiene Information System Sample Results Report	formatio ults Repc	n System ort		Page:	18 of 19
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Hecan	Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration	
- X4-	X SSOC SIMPSON, MARK W								
75	TANK 207-02032003-23-015		INSIDE	WALL AREA WEST, ABOVE 8 FT, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
5550	TANK 207-02032003-23-016		INSIDE	WALL AREA SOUTH, ABOVE 8 FT, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
532	TANK 207-02032003-23-017		INSIDE	WALL AREA SOUTH, ABOVE 8 FT, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
2f.	TANK 207-02032003-23-018		INSIDE	WALL AREA SOUTH, ABOVE 8 FT, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
الحدرا	7 TANK 207-02032003-23-019		INSIDE	WALL AREA EAST, ABOVE 8 FT,TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
The	TANK 207-02032003-23-020		INSIDE	WALL AREA EAST, ABOVE 8 FT, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02032003-23-021		INSIDE	WALL AREA EAST, ABOVE 8 FT, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02032003-23-022		INSIDE	WALL AREA NORTH, ABOVE 8 FT, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02032003-23-023		INSIDE	WALL AREA NORTH, ABOVE 8 FT, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02032003-23-024		INSIDE	WALL AREA NORTH, ABOVE 8 FT, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02032003-23-025		INSIDE	FLOOR AREA WEST, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02032003-23-026		INSIDE	FLOOR AREA WEST, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	0.1470 UG/100CM2	
	TANK 207-02032003-23-027		INSIDE	FLOOR AREA WEST, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	0.2070_UG/100CM2	
	TANK 207-02032003-23-028		INSIDE	FLOOR AREA SOUTH, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	0.1050 _ UG/100CM2	
	TANK 207-02032003-23-029		INSIDE	FLOOR AREA SOUTH, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02032003-23-030		INSIDE	FLOOR AREA SOUTH, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	0.1330UG/100CM2	
	TANK 207-02032003-23-031		INSIDE	FLOOR AREA EAST, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	
	TANK 207-02032003-23-032		INSIDE	FLOOR AREA EAST, BELOW CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2	

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SURFACE

19 of 19

Page:

Sample Results Report IHISR_SAMPLE_RESULTS_REPORT

Date: 05/02/2003

BERYLLIUM AND B < 0.1000_UG/100CM2 0.1010_ UG/100CM2 0.1200_ UG/100CM2 BERYLLIUM AND B 0.1250 GG/100C/MZ Concentration BERYLLIUM AND B BERYLLIUM AND B Analyte 03Z0852 03Z0852 03Z0852 03Z0852 Rin No Type WIPE WIPE WIPE FLOOR AREA NORTH, BARE METAL WIPE FLOOR AREA NORHT, TOP OF CC FIXATIVE FLOOR AREA NORTH, BELOW CC FIXATIVE FLOOR AREA EAST, BARE METAL Location Room INSIDE INSIDE INSIDE INSIDE Work Pkg Building Subtotal: 45 Hygienist Subtotal: 45 TANK 207-02032003-23-035 TANK 207-02032003-23-033 TANK 207-02032003-23-034 TANK 207-02032003-23-036 SIMPSON, MARK W Sample Number ssoc

Grand Total 316

Company Subtotal: 45

ATTACHMENT D2

Tank 207 In-Process Demolition Rad & Be Survey Data

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE **INSTRUMENT DATA** Mfg. Ludlum Mfg. NA Mfg. NE Electra Survey type: Contamination Model 2929 Model Model DP-6 Building: Tank 207 Serial # 109534 Serial # Serial # 1665 Location: Inside Tank Cal Due 3/30/03 Cal Due Cal Due 3/3/03 Purpose: Separate Drain Line from Tank Floor Bkg. 0.4 cpm α Surveys during tank demo Bkg. Bkg. $5 cpm \alpha$ Efficiency 34.5 % Efficiency Efficiency 21.0 RWP#: 03-RISS-011 **MDA** 18 dpm α MDA NA MDA $62 dpm \alpha$ Date: 2/21/03 Time: 1030 Mfg. Ludlum Mfg. NA Mfg. NE Electra Model 2929 Model Model DP-6 Serial # Serial # 109534 Serial # 1665 3/30/03 Cal Due Cal Due Cal Due 3/3/03 Bkg. $74.2 \text{ cpm } \beta$ Bkg. Bkg. 689 cpm β RCT: NA NA Efficiency 38.8 % Efficiency Efficiency 29.5 % Print name Signature Emp. # **MDA** $205~\text{dpm}~\beta$ 423 dpm β MDA NA **MDA**

PRN/REN#: NA

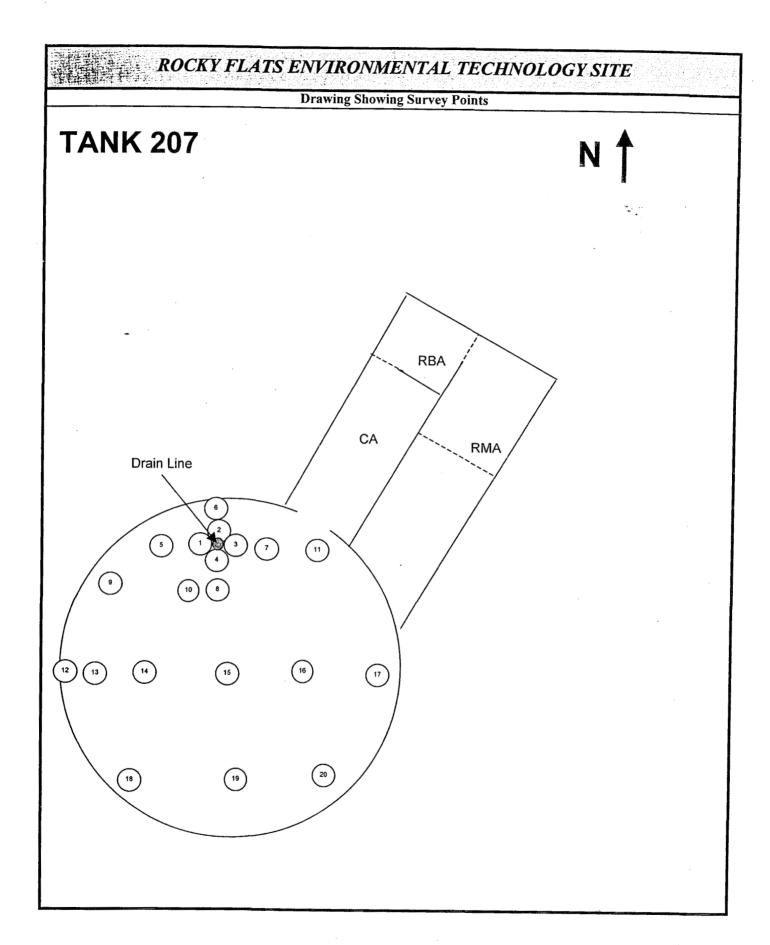
Comments: Cut 2" section of floor around drain line to allow removal of floor without disturbing drain line.

Survey performed on cut line prior to reapplication of CC Fix.

SURVEY RESULTS

Swins			ALPHA			BETA	
Swipe #	LOCATION/DESCRIPTION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Floor (At Cut Line)	84	360	NA	<205	3000	NA
2	Floor (At Cut Line)	87	360		<205	≟3000.	
3	Floor (At Cut Line)	123	= 600 :		<205	4500	
4	Floor (At Cut Line)	183	- 600		<205	7500	
5	Floor (2' From Cut Line)	_318 ;;;	NA		<205	NA	
6	Floor (2' From Cut Line)	21			<205		
7	Floor (2' From Cut Line)	· :: 36 :::			<205		
8	Floor (2' From Cut Line)	i-21:%			<205		
9	Floor	<18			<205		
10	Floor	<18			<205		
11	Floor	<18			<205		
12	Horizontal Ledge of Ionex Access	<18			<205		
13	Floor	<18			<205		
14	Floor	<18			<205		
15	Floor (Around Center Support Beam)	231			<205		
16	Floor	<18			<205		
17	Floor	<18			<205		
18	Floor	<18			<205		
19	Floor	<18	—	 	<205	-	+
20	Floor	<18	NA	ŇA	<205	NA	NA

Date Reviewed: 2:24-03 RS Supervision:



AIR

1 of 6

Page:

IHISR_SAMPLE_RESULTS_REPORT Date: 05/29/2003

Sample Number	Employee	Room Task	Rin No	Analyte	Concentration	8Hr TWA	% PEL
КН							
TANK 207-04282003-00-001	PAUL M FORD PAUL M FORD PAUL M FORD	INSIDE INSIDE INSIDE	03Z1509 03Z1509 03Z1509	BERYLLIUM AND BE COMPOULEAD INORGANIC (AS PB)	< 0.1535 _ UG/M3 < 0.0031 _ MG/M3 < 0.0038 _ MG/M3	<0.0198_UG/M3 <0.0004_MG/M3 <0.0005_MG/M3	< 0.9900% < 0.8000% < 0.1000%
TANK 207-04282003-00-002	DANIEL E. PRICE DANIEL E. PRICE DANIEL E. PRICE	INSIDE INSIDE INSIDE	03Z1509 03Z1509 03Z1509	BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR	< 0.1523 _ UG/M3 < 0.0030 _ MG/M3 < 0.0038 _ MG/M3	<0.0197UG/M3 <0.0004MG/M3 <0.0005MG/M3	< 0.9850% < 0.8000% < 0.1000%
TANK 207-04282003-00-003	ERNEST SOTO ERNEST SOTO ERNEST SOTO	INSIDE INSIDE INSIDE	03Z1509 03Z1509 03Z1509	BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR	< 0.0660_UG/M3 < 0.0013_MG/M3 < 0.0016_MG/M3	<0.0209_UG/M3 <0.0004_MG/M3 <0.0005_MG/M3	< 1.0450% < 0.8000% < 0.1000%
TANK 207-04282003-00-004	EDWARD MICHAEL EDWARD MICHAEL EDWARD MICHAEL	INSIDE INSIDE	03Z1509 03Z1509	BERYLLIUM AND BE COMPOULEAD INORGANIC (AS PB)	< 0.0690 _ UG/M3 < 0.0014 _ MG/M3 < 0.0017 _ MG/M3	<0.0200_UG/M3 <0.0004_MG/M3	1.0000%0.8000%
TANK 207-04282003-00-005	SCOTT D MAHONEY SCOTT D MAHONEY SCOTT D MAHONEY	INSIDE INSIDE INSIDE	03Z1509 03Z1509 03Z1509 03Z1509	BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR BERYLLIUM AND BE COMPOU	 < 0.1338 _ UG/M3 < 0.0027 _ MG/M3 < 0.0033 _ MG/M3 < 0.0735 _ UG/M3 	<pre><0.0201_UG/M3</pre><pre><0.0004_MG/M3</pre><pre><0.0005_MG/M3</pre><pre><0.0199_UG/M3</pre>	
TANK 207-04292003-00-007	PAUL M FORD PAUL M FORD DANIEL E. PRICE	INSIDE INSIDE INSIDE	03Z1509 03Z1509 03Z1509 03Z1509	LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR BERYLLIUM AND BE COMPOU	 c.0015MG/M3 c.0018MG/M3 c.0012UG/M3 c.0014MG/M3 	<pre><0.0004_ MG/M3</pre> <0.0005_ MG/M3 <0.0197_ UG/M3 <0.0004_ MG/M3	
TANK 207-04292003-00-008	DANIEL E. PRICE ERNEST SOTO ERNEST SOTO ERNEST SOTO	INSIDE INSIDE INSIDE	03Z1509 03Z1509 03Z1509 03Z1509	CHROMIUM, METAL AND INOR BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR	< 0.0018 _ MG/M3 < 0.0631 _ UG/M3 < 0.0013 _ MG/M3 < 0.0016 _ MG/M3	<0.0005 _ MG/M3 <0.0206 _ UG/M3 <0.0004 _ MG/M3 <0.0005 _ MG/M3	0.1000%1.0300%0.8000%0.1000%

AIR

2 of 6

Page:

HISR_SAMPLE_RESULTS_REPORT

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Sample Number	Employee	Коош	I ask	NIN NO	Analyte	Concentration	SHF IWA	% PEL	
КН									
TANK 207-04292003-00-009	EDWARD MICHAEL	INSIDE		03Z1509	BERYLLIUM AND BE COMPOU	< 0.0582_UG/M3	<0.0203_UG/M3	< 1.0150%	20%
	EDWARD MICHAEL	INSIDE	0	03Z1509	LEAD INORGANIC (AS PB)	< 0.0012 _ MG/M3	<0.0004 _ MG/M3	× 0.8000%	%00
	EDWARD MICHAEL	INSIDE		03Z1509	CHROMIUM, METAL AND INOR	< 0.0015 _ MG/M3	<0.0005 MG/M3	< 0.1000%	%00
TANK 207-04292003-00-010	SCOTT D MAHONEY	INSIDE	0	03Z1509	BERYLLIUM AND BE COMPOU	< 0.1311_UG/M3	<0.0208_UG/M3	< 1.0400%	%00
	SCOTT D MAHONEY	INSIDE	0	03Z1509	LEAD INORGANIC (AS PB)	< 0.0026 _ MG/M3	<0.0004_MG/M3	< 0.8000%	%00
	SCOTT D MAHONEY	INSIDE	0	03Z1509	CHROMIUM, METAL AND INOR	< 0.0033 _ MG/M3	<0.0005_MG/M3	< 0.1000%	%00
TANK 207-04292003-00-011	GARY G HARDING	INSIDE	0	03Z1509	BERYLLIUM AND BE COMPOU	< 0.2682_UG/M3	<0.0201_UG/M3	< 1.0050%	20%
	GARY G HARDING	INSIDE	0	03Z1509	LEAD INORGANIC (AS PB)	< 0.0054_MG/M3	<0.0004_MG/M3	%0008°0 >	%00
	GARY G HARDING	INSIDE	0	03Z1509	CHROMIUM, METAL AND INOR	< 0.0067 _ MG/M3	<0.0005MG/M3	< 0.1000%	%00
TANK 207-04292003-00-012			0	03Z1509	BERYLLIUM AND BE COMPOU	< 0.0200 _ UG	>_ UG		V
			0	03Z1509	LEAD INORGANIC (AS PB)	< 0.4000 _ UG	>_ UG		٧
			9	03Z1509	CHROMIUM, METAL AND INOR	< 0.5000 _ UG	9n ⁻ >		V
TANK 207-04302003-00-001	PAUL M FORD	INSIDE	0	03Z1556	BERYLLIUM AND BE COMPOU	< 0.0629_UG/M3	<0.0198_UG/M3	%0066·0 >	%00
	PAUL M FORD	INSIDE	0	03Z1556	LEAD INORGANIC (AS PB)	< 0.0013 _ MG/M3	<0.0004 _ MG/M3	< 0.8000%	%00
	PAUL M FORD	INSIDE	0	03Z1556	CHROMIUM, METAL AND INOR	< 0.0016 _ MG/M3	<0.0005_MG/M3	< 0.1000%	%00
TANK 207-04302003-00-002	DANIEL E. PRICE	INSIDE	0	03Z1556	BERYLLIUM AND BE COMPOU	< 0.0612_UG/M3	<0.0195_UG/M3	< 0.9750%	20%
	DANIEL E. PRICE	INSIDE	0	03Z1556	LEAD INORGANIC (AS PB)	< 0.0012_ MG/M3	<0.0004MG/M3	× 0.8000%	%00
	DANIEL E. PRICE	INSIDE	0	03Z1556	CHROMIUM, METAL AND INOR	< 0.0015_ NIG/M3	<0.0005 _ MG/M3	< 0.1000%	%00
TANK 207-04302003-00-003	ERNEST SOTO	INSIDE	0	03Z1556	BERYLLIUM AND BE COMPOU	< 0.0592_UG/M3	<0.0191_UG/M3	< 0.9550%	20%
	ERNEST SOTO	INSIDE	0	03Z1556	LEAD INORGANIC (AS PB)	< 0.0012 MG/M3	<0.0004 _ MG/M3	< 0.8000%	%00
	ERNEST SOTO	INSIDE	0	03Z1556	CHROMIUM, METAL AND INOR	< 0.0015_MG/M3	<0.0005_ MG/M3	< 0.1000%	%00
TANK 207-04302003-00-004	EDWARD MICHAEL	INSIDE	0	03Z1556	BERYLLIUM AND BE COMPOU	< 0.0540UG/M3	<0.0200 _ UG/M3	< 1.0000%	%00
	EDWARD MICHAEL	INSIDE	0	03Z1556	LEAD INORGANIC (AS PB)	< 0.0011 _ MG/M3	<0.0004 _ MG/M3	× 0.8000%	%00
	EDWARD MICHAEL	INSIDE	0	03Z1556	CHROMIUM, METAL AND INOR	< 0.0013 _ MG/M3	<0.0005_MG/M3	< 0.1000%	%00

Page:

3 of 6

AIR

AIR SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Employee	Room Task	Rin No	Analyte	Concentration	8Hr TWA	% PEL
КН							
TANK 207-04302003-00-005	SCOTT D MAHONEY SCOTT D MAHONEY	INSIDE INSIDE	03Z1556 03Z1556	BERYLLIUM AND BE COMPOULEAD INORGANIC (AS PB)	< 0.1816_UG/M3 < 0.0036_MG/M3	<0.0197UG/M3 <0.0004MG/M3	0.9850%0.8000%
TANK 207-04302003-00-006		NSIDE INSIDE	03Z1556 03Z1556 03Z1556	BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) CHROMIUM METAL AND INOR	 c.0200 UG c.4000 UG c.5000 UG 	- UG - NG	
TANK 207-05012003-00-007	PAUL M FORD PAUL M FORD PAUL M FORD	INSIDE INSIDE	03Z1556 03Z1556 03Z1556	BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR	< 0.0343 _ UG/M3 < 0.0007 _ MG/M3 < 0.0009 _ MG/M3	<0.0188_UG/M3 <0.0004_MG/M3 <0.0005_MG/M3	< 0.9400% < 0.8000% < 0.1000%
TANK 207-05012003-00-008	DANIEL E. PRICE DANIEL E. PRICE DANIEL E. PRICE	INSIDE INSIDE INSIDE	03Z1556 03Z1556 03Z1556	BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR	< 0.0627 _ UG/M3 < 0.0013 _ MG/M3 < 0.0016 _ MG/M3	<0.0191_UG/M3 <0.0004_MG/M3 <0.0005_MG/M3	0.9550%0.8000%0.1000%
TANK 207-05012003-00-009	ERNEST SOTO ERNEST SOTO ERNEST SOTO	INSIDE INSIDE INSIDE	03Z1556 03Z1556 03Z1556	BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR	< 0.0287 _ UG/M3 < 0.0006 _ MG/M3 < 0.0007 _ MG/M3	<0.0182_UG/M3 <0.0004_MG/M3 <0.0005_MG/M3	< 0.9100% < 0.8000% < 0.1000%
TANK 207-05012003-00-010 TANK 207-05012003-00-011	EDWARD MICHAEL EDWARD MICHAEL EDWARD MICHAEL SCOTT D MAHONEY	INSIDE INSIDE INSIDE	03Z1556 03Z1556 03Z1556 03Z1556	BERYLLIUM AND BE COMPOULEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR	< 0.0265 _ UG/M3 < 0.0005 _ MG/M3 < 0.0007 _ MG/M3 < 0.0731 _ UG/M3	<0.0195_UG/M3 <0.0004_MG/M3 <0.0005_MG/M3	< 0.9750% < 0.8000% < 0.1000% < 0.9750%
TANK 207-05062003-00-001	SCOTT D MAHONEY SCOTT D MAHONEY PAUL M FORD PAUL M FORD	INSIDE INSIDE INSIDE INSIDE	03Z1556 03Z1556 03Z1589 03Z1589	LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) CHROMIUM, METAL AND INOR	< 0.0015 _ MG/M3 < 0.0018 _ MG/M3 < 0.0506 _ UG/M3 < 0.0010 _ MG/M3 < 0.0013 _ MG/M3	<pre><0.0004 _ MG/M3 <0.0005 _ MG/M3 <0.0192 _ UG/M3 <0.0004 _ MG/M3 <0.0005 _ MG/M3</pre>	0.8000%0.1000%0.9600%0.8000%0.1000%

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

Date: 05/29/2003

Industrial Hygiene Information System Sample Results Report

AIR

4 of 6

Page:

AIR SAMPLING DURING TANK 207 DEMOLITION

% PEL	
8Hr TWA	
Concentration	
Analyte	
Rin No	
Task	
Room	
Employee	
Sample Number	
	r Employee Room Task Rin No Analyte Concentration 8Hr TWA %P

0.1000% < 0.9850% 0.8000% 0.1000% 1.0000% 0.8000% 0.1000% 0.1200% 0.9300% 0.8000% 0.9350% 0.8000% 0.1000% 0.9850% 0.8000% 0.9150% 0.8000% 0.1000% 0.8000% 1.0050% 0.8000% 0.1000% 0.9550% <0.0197_UG/M3 <0.0004 _ MG/M3 <0.0004_MG/M3 <0.0004 _ MG/M3 <0.0191 _ UG/M3 <0.0004 _ MG/M3 <0.0005_MG/M3 <0.0004 _ MG/M3 <0.0005 _ MG/M3 <0.0197 _ UG/M3 <0.0004_MG/M3 <0.0005_MG/M3 <0.0004 _ MG/M3 <0.0005 _ MG/M3 <0.0004 _ MG/M3 <0.0005 MG/M3 <0.0186_UG/M3 <0.0201 _ UG/M3 <0.0187_UG/M3 <0.0183_UG/M3 <0.0200 _ UG/M3 0.0006 MG/M3 0.0005_MG/M3 0.0005 MG/M3 < 0.0016 _ MG/M3 < 0.0047 _ MG/M3 < 0.0059 _ MG/M3 < 0.0012 _ MG/M3 < 0.0012 MG/M3 < 0.0015 MG/M3 < 0.0631 UG/M3 < 0.0013 MG/M3 < 0.0549 UG/M3 < 0.0011 _ MG/W3 < 0.0797 _ UG/M3 < 0.0803 UG/M3 < 0.0016 _ MG/M3 < 0.2345_UG/M3 < 0.0580 _ UG/M3 < 0.0015 MG/M3 < 0.0618 UG/M3 < 0.0012 _ MG/M3 < 0.0015 MG/M3 < 0.0606 _ UG/M3 < 0.0016 MG/M3 0.0016 MG/M3 0.0022 _ MG/M3 0.0020 MG/M3 CHROMIUM, METAL AND INOR CHROMIUM, METAL AND INOR CHROMIUM, METAL AND INOR BERYLLIUM AND BE COMPOU CHROMIUM, METAL AND INOR CHROMIUM, METAL AND INOR BERYLLIUM AND BE COMPOU CHROMIUM, METAL AND INOR **SERYLLIUM AND BE COMPOU** CHROMIUM, METAL AND INOR BERYLLIUM AND BE COMPOU CHROMIUM, METAL AND INOR BERYLLIUM AND BE COMPOU BERYLLIUM AND BE COMPOU BERYLLIUM AND BE COMPOU BERYLLIUM AND BE COMPOU LEAD INORGANIC (AS PB) 03Z1589 03Z1589 03Z1589 0321589 03Z1589 03Z1589 03Z1589 03Z1589 03Z1589 03Z1589 03Z1589 0321589 0321589 0321589 0321589 0321589 03Z1589 03Z1589 03Z1589 03Z1589 03Z1589 03Z1589 03Z1589 INSIDE NSIDE SCOTT D MAHONEY SCOTT D MAHONEY SCOTT D MAHONEY **EDWARD MICHAEL** EDWARD MICHAEL EDWARD MICHAEL EDWARD MICHAEL EDWARD MICHAEL EDWARD MICHAEL DANIEL E. PRICE **ERNEST SOTO ERNEST SOTO ERNEST SOTO** ERNEST SOTO **ERNEST SOTO ERNEST SOTO** PAUL M FORD PAUL M FORD TANK 207-05062003-00-002 TANK 207-05062003-00-005 TANK 207-05072003-00-009 TANK 207-05072003-00-006 TANK 207-05062003-00-004 TANK 207-05072003-00-008 TANK 207-05062003-00-003 TANK 207-05072003-00-007 Ŧ

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AIR

Page:

5 of 6

AIR SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Employee	Room	Task	Rin No	Analyte	Concentration	8Hr TWA	% PEL
КН								
TANK 207-05072003-00-010				03Z1589	BERYLLIUM AND BE COMPOU	< 0.0200 _ UG	9n ⁻ >	v
				03Z1589	LEAD INORGANIC (AS PB)	< 0.4000 _ UG	5U_ >	v
				03Z1589	CHROMIUM, METAL AND INOR	0.5740_UG	ng –	
TANK 207-05082003-00-011	PAUL M FORD	INSIDE		03Z1621	BERYLLIUM AND BE COMPOU	< 0.2626_UG/M3	<0.0191_UG/M3	< 0.9550%
	PAUL M FORD	INSIDE		03Z1621	LEAD INORGANIC (AS PB)	< 0.0053 _ MG/M3	<0.0004_MG/M3	< 0.8000%
	PAUL M FORD	INSIDE		03Z1621	CHROMIUM, METAL AND INOR	< 0.0066 _ MG/M3	<0.0005_MG/M3	< 0.1000%
TANK 207-05082003-00-012	DANIEL E. PRICE	INSIDE		03Z1621	BERYLLIUM AND BE COMPOU	< 0.3111 _ UG/M3	<0.0194_UG/M3	< 0.9700%
	DANIEL E. PRICE	INSIDE		03Z1621	LEAD INORGANIC (AS PB)	< 0.0062 _ MG/M3	<0.0004_MG/M3	< 0.8000%
	DANIEL E. PRICE	INSIDE		03Z1621	CHROMIUM, METAL AND INOR	< 0.0078 _ MG/M3	<0.0005_MG/M3	< 0.1000%
TANK 207-05082003-00-013	ERNEST SOTO	INSIDE		03Z1621	BERYLLIUM AND BE COMPOU	< 0.2901 _ UG/M3	<0.0181_UG/M3	< 0.9050%
	ERNEST SOTO	INSIDE		03Z1621	LEAD INORGANIC (AS PB)	< 0.0058 MG/M3	<0.0004_MG/M3	< 0.8000%
	ERNEST SOTO	INSIDE		03Z1621	CHROMIUM, METAL AND INOR	< 0.0073 _ MG/M3	<0.0005_MG/M3	< 0.1000%
TANK 207-05082003-00-014	EDWARD MICHAEL	INSIDE		03Z1621	BERYLLIUM AND BE COMPOU	< 0.0324_UG/M3	<0.0200_UG/M3	< 1.0000%
	EDWARD MICHAEL	INSIDE		03Z1621	LEAD INORGANIC (AS PB)	< 0.0006 MG/M3	<0.0004_MG/M3	< 0.8000%
	EDWARD MICHAEL	INSIDE		03Z1621	CHROMIUM, METAL AND INOR	< 0.0008_MG/M3	<0.0005_MG/M3	< 0.1000%
TANK 207-05082003-00-015				03Z1621	BERYLLIUM AND BE COMPOU	< 0.0200 _ UG	9n ⁻>	v
				03Z1621	LEAD INORGANIC (AS PB)	< 0.4000 _ UG	9n ->	v
				03Z1621	CHROMIUM, METAL AND INOR	< 0.5000 _ UG	5U_ ^	v
TANK 207-05122003-322-001	ERNEST SOTO	INSIDE		03Z1660	BERYLLIUM AND BE COMPOU	< 0.0331 UG/M3	<0.0204_UG/M3	< 1.0200%
	ERNEST SOTO	INSIDE		03Z1660	CHROMIUM, METAL AND INOR	< 0.0008 _ MG/M3	<0.0005_ MG/M3	< 0.1000%
	ERNEST SOTO	INSIDE		03Z1660	LEAD INORGANIC (AS PB)	< 0.0007 _ MG/M3	<0.0004_MG/M3	> 0.8000%
TANK 207-05122003-322-002	EDWARD MICHAEL	INSIDE		03Z1660	BERYLLIUM AND BE COMPOU	< 0.0323 _ UG/M3	<0.0197_UG/M3	< 0.9850%
	EDWARD MICHAEL	INSIDE		03Z1660	CHROMIUM, METAL AND INOR	0.0009_MG/M3	0.0005_MG/M3	0.1000%
	EDWARD MICHAEL	INSIDE		03Z1660	LEAD INORGANIC (AS PB)	< 0.0006 _ MG/M3	<0.0004_MG/M3	%0008 ^{.0} >

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

AIR

9 of 6

Page:

% PEL

< 0.8650% < 0.0800%

<u. 0.0173_ UG/M3
<u. 0.0004_ MG/M3
<u. 0.0003_ UG/M3
<u. 0.0005_ MG/M3
<u. 0.0005_ MG/M3

<u. 0.0004_ MG/M3
<u. 0.00004_ UG/M3

< 0.0011 _ MG/M3 < 0.0009 _ MG/M3

CHROMIUM, METAL AND INOR

03Z1668 03Z1668

INSIDE

INSIDE

LEAD INORGANIC (AS PB)

BERYLLIUM AND BE COMPOU

< 0.0430 _ UG/M3

9n -9n -

< 0.0200 _ UG < 0.5000 _ UG < 0.4000 _ UG

BERYLLIUM AND BE COMPOU CHROMIUM, METAL AND INOR

03Z1660 03Z1660 03Z1660 03Z1668

TANK 207-05122003-322-003

ž

LEAD INORGANIC (AS PB)

0.6000%

0.1000%

< 0.0013 _ MG/M3 < 0.0010 _ MG/M3

CHROMIUM, METAL AND INOR

LEAD INORGANIC (AS PB)

03Z1668

BERYLLIUM AND BE COMPOU

03Z1668 03Z1668

INSIDE

INSIDE

INSIDE

< 0.0506_UG/M3

0.8000%

0.7000%0.0800%0.6000%

<0.0004 _ MG/M3

< 0.0076 _ MG/M3 < 0.0061 _ MG/M3

CHROMIUM, METAL AND INOR

LEAD INORGANIC (AS PB)

BERYLLIUM AND BE COMPOU

03Z1668 03Z1668 03Z1668

INSIDE

INSIDE

INSIDE

< 0.3057 _ UG/M3

<0.0003 _ MG/M3

on_^

< 0.0200 _ UG

BERYLLIUM AND BE COMPOU CHROMIUM, METAL AND INOR

_ UG __ UG

0.5120_UG < 0.4000_UG

LEAD INORGANIC (AS PB)

03Z1668

03Z1668

AIR SAMPLING DURING TANK 207 DEMOLITION

Date: 05/29/2003

Concentration Analyte Rin No Task Room Employee Sample Number

TANK 207-05132003-322-101 EDWARD MICHAEL

EDWA

Building Total: 45

Company Total: 45

Grand Total: 45

HISR_SAMPLE_RESULTS_REPORT

14

IHISR_SAMPLE_RESULTS_REPORT

Datr : 05/29/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

Page: 1 of 15

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
<i>кн</i> HIEBERT, DOUG G							
TANK 207-04282003-00-101		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-102		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-103		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-104		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-105		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-106		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-107		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-108		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-04282003-00-109	-	INSIDE	SHEAR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-04282003-00-110				BLANK	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04282003-00-111		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-112		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-113		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-114		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-115		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-116		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-117		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-118		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Date: 05/29/2003

SURFACE

Industrial Hygiene Information System Sample Results Report

Page:

2 of 15

Sample Number	Work Pkg Room	Location	Туре	Rin No	Analyte	Concentration
КН						
HIEBERT, DOUG G						
TANK 207-04282003-00-119	INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-120			BLANK	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04292003-00-121	INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-122	INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-04292003-00-123	INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-124	INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-125	INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-126	INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-127	INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-128	INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-129	INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-130	INSIDE	SHEAR INSIDE CAB	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-04302003-00-101	INSIDE	2ND INTERMODAL TOP SIDE RIM	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-102	INSIDE	2ND INTERMODAL TOP SIDE RIM	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-103	INSIDE	FIRST INTERMODAL TOP SIDE RIM	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-104	INSIDE	1ST INTERMODAL TOP SIDE RIM	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-105	INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-106	INSIDE	PROCESSOR ON TRACK	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Date: 05/29/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

Page:

3 of 15

Pag

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
<i>кн</i> HIEBERT, DOUG G							
TANK 207-04302003-00-107		INSIDE	PROCESSOR ON TRACK	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-108		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-109		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-110		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-111		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-112		INSIDE	SHEAR IN CAB ON FLOOR	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-113		INSIDE	SHEAR ON TRACK	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-114		INSIDE	SHEAR ON TRACK	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-115		INSIDE	SHEAR SIDE OF JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-116		INSIDE	SHEAR SIDE OF JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-117		INSIDE	SHEAR INSIDE JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-118		INSIDE	SHEAR INSIDE JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-119				BLANK	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04302003-00-120				BLANK	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05012003-00-131		INSIDE	ON INTERMODAL 001036 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-132		INSIDE	ON INTERMODAL 001036 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-133		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-134		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Date: 05/29/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

4 of 15

Page:

Sample Number	Work Pkg	Room	Location	Туре	Rin No +	Analyte	Concentration
<i>кн</i> Hiebert, Doug G				·			
TANK 207-05012003-00-135		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-136		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-137		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-138		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-139		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-140		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-141		INSIDE	ON INTERMODAL 001030 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-142		INSIDE	ON INTERMODAL 001030 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-143		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-144		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-145		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-146		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-147		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-148		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 UG/100CM2
TANK 207-05012003-00-149		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-150		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-151		INSIDE	ON INTERMODAL 001039 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-152		INSIDE	ON INTERMODAL 001039 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

SURFACE

5 of 15

Page:

HISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

SURFACE SAMPLING DURING TANK 207 DEMOLITION

BERYLLIUM AND B < 0.1000_UG/100CM2 BERYLLIUM AND B < 0.1000 UG/100CM2 < 0.1000 _ UG/100CM2 BERYLLIUM AND B < 0.1000 _ UG/100CM2 BERYLLIUM AND B < 0.1000 LIG/100CM2 BERYLLIUM AND B < 0.1000 LIG/100CM2 < 0.1000 _ UG/100CM2 BERYLLIUM AND B < 0.1000 LIG/100CM2 < 0.1000 _ UG/100CM2 BERYLLIUM AND B < 0.1000_UG/100CM2 BERYLLIUM AND B < 0.1000 _ UG/100CM2 BERYLLIUM AND B < 0.1000 _ UG/100CM2 < 0.1000 _ UG/100CM2 BERYLLIUM AND B < 0.1000_UG/100CM2 BERYLLIUM AND B < 0.1000 LIG/100CM2 BERYLLIUM AND B < 0.1000 _ UG/100CM2 < 0.1000 _ UG/100CM2 BERYLLIUM AND B < 0.1000 _ UG/100CM2 Concentration BERYLLIUM AND B 03Z1569 Rin No Type WIPE ON INTERMODAL 001039 TOP LIP ON INTERMODAL 001037 TOP LIP ON INTERMODAL 001039 TOP LIP ON INTERMODAL 001039 TOP LIP ON INTERMODAL 001039 TOP LIP ON INTERMODAL 001037 SIDE ON INTERMODAL 001037 SIDE ON INTERMODAL 001039 SIDE ON INTERMODAL 001039 SIDE ON INTERMODAL 001039 SIDE ON INTERMODAL 001039 SIDE ON INTERMODAL 001037 SIDE ON INTERMODAL 001037 SIDE ON INTERMODAL 001037 END ON INTERMODAL 001037 END Location Room INSIDE TANK 207-05012003-00-153 TANK 207-05012003-00-155 TANK 207-05012003-00-160 TANK 207-05012003-00-161 TANK 207-05012003-00-163 TANK 207-05012003-00-165 TANK 207-05012003-00-166 TANK 207-05012003-00-167 TANK 207-05012003-00-168 TANK 207-05012003-00-169 TANK 207-05012003-00-154 TANK 207-05012003-00-156 TANK 207-05012003-00-157 TANK 207-05012003-00-158 TANK 207-05012003-00-159 TANK 207-05012003-00-162 TANK 207-05012003-00-164 TANK 207-05012003-00-170 HIEBERT, DOUG G Sample Number

HISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

6 of 15

Page:

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
<i>KH</i> HIEBERT, DOUG G							
TANK 207-05012003-00-171		INSIDE	PROCESSOR INSIDE JAW	WiPE	03Z1569	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05012003-00-172		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-173		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05012003-00-174		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-175		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-176		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05012003-00-177		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05012003-00-178		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-179		INSIDE	PROCESSOR IN CAB	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-180				BLANK	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05012003-00-181		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1569	BERYLLIUM AND B	0.1530_UG/100CM2
TANK 207-05012003-00-182		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1569	BERYLLIUM AND B	0.7020_UG/100CM2
TANK 207-05012003-00-183		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-184		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-185		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-186		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-187		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-188		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

7 of 15

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Sample Number	Work Pkg	Коот	Location	Туре	Rin No	Analyte	Concentration
<i>KH</i> HIEBERT, DOUG G							
TANK 207-05012003-00-189		INSIDE	SHEAR IN CAB	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05012003-00-190				BLANK	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-101		INSIDE	INTERMODAL BFLU000204 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-102		INSIDE	INTERMODAL BFLU000204 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 UG/100CM2
TANK 207-05122003-00-103		INSIDE	INTERMODAL BFLU000204 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-104		INSIDE	INTERMODAL BFLU000204 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-105		INSIDE	INTERMODAL BFLU000204 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-106		INSIDE	INTERMODAL BFLU000204 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-107		INSIDE	INTERMODAL BFLU000204 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-108		INSIDE	INTERMODAL BFLU000204 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-109		INSIDE	INTERMODAL BFLU000204 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-110		INSIDE	INTERMODAL BFLU000204 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-111		INSIDE	INTERMODAL GFLU001068 END	WIPE	03Z1588	BERYLLIUM AND B	< 0,1000 _ UG/100CM2
TANK 207-05122003-00-112		INSIDE	INTERMODAL GFLU001068 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-113		INSIDE	INTERMODAL GFLU001068 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-114		INSIDE	INTERMODAL GFLU001068 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-115		INSIDE	INTERMODAL GFLU001068 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-116		INSIDE	INTERMODAL GFLU001068 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

154

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

Industrial Hygiene Information System Sample Results Report

SURFACE

ige: 8 of 15

Page:

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
<i>KH</i> HIEBERT, DOUG G							
TANK 207-05122003-00-117		INSIDE	INTERMODAL GFLU001068 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-118		INSIDE	INTERMODAL GFLU001068 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-119		INSIDE	INTERMODAL GFLU001068 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-120		INSIDE	INTERMODAL GFLU001068 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-121		INSIDE	INTERMODAL BFLU000033 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-122		INSIDE	INTERMODAL BFLU000033 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-123		INSIDE	INTERMODAL BFLU000033 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-124		INSIDE	INTERMODAL BFLU000033 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-125		INSIDE	INTERMODAL BFLU000033 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-126		INSIDE	INTERMODAL BFLU000033 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-127		INSIDE	INTERMODAL BFLU000033 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-128		INSIDE	INTERMODAL BFLU000033 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-129		INSIDE	INTERMODAL BFLU000033 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-130		INSIDE	INTERMODAL BFLU000033 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-131		INSIDE	INTERMODAL MHFU001030 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-132		INSIDE	INTERMODAL MHFU001030 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-133		INSIDE	INTERMODAL MHFU001030 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-134		INSIDE	INTERMODAL MHFU001030 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

SURFACE

9 of 15

Page:

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Samula Number	Mork Dkg	Q	solitoro I	Tyno	i o	Option	and the state of t
	8v - 41044		LOCATO	iype	ON III	Alialyte	Concentration
<i>кн</i> Hiebert, doug g							
TANK 207-05122003-00-135		INSIDE	INTERMODAL MHFU001030 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-136		INSIDE	INTERMODAL MHFU001030 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-137		INSIDE	INTERMODAL MHFU001030 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-138		INSIDE	INTERMODAL MHFU001030 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-139		INSIDE	INTERMODAL MHFU001030 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-140		INSIDE	INTERMODAL MHFU001030 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-141		INSIDE	INTERMODAL MHFU001037 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 UG/100CM2
TANK 207-05122003-00-142		INSIDE	INTERMODAL MHFU001037 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-143		INSIDE	INTERMODAL MHFU001037 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-144		INSIDE	INTERMODAL MHFU001037 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-145		INSIDE	INTERMODAL MHFU001037 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-146		INSIDE	INTERMODAL MHFU001037 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-147		INSIDE	INTERMODAL MHFU001037 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-148		INSIDE	INTERMODAL MHFU001037 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-149		INSIDE	INTERMODAL MHFU001037 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-150		INSIDE	INTERMODAL MHFU001037 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-151				BLANK	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-152		INSIDE	JERSEY BARRIER 1	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 UG/100CM2

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

Industrial Hygiene Information System Sample Results Report

10 of 15

Page:

HISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

SURFACE SAMPLING DURING TANK 207 DEMOLITION

SURFACE

BERYLLIUM AND B < 0.1000 _ UG/100CM2 < 0.1000 UG/100CM2 < 0.1000 _ UG/100CM2 < 0.1000 _ UG/100CM2 BERYLLIUM AND B < 0.1000_UG/100CM2 BERYLLIUM AND B < 0.1000 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.1000 UG/100CM2 < 0.1000 _ UG/100CM2 < 0.1000 _ UG/100CM2 < 0.1000 UG/100CM2 < 0.1000 _ UG/100CM2 Concentration BERYLLIUM AND B 03Z1588 Rin No Type WIPE SOUTH VALVE PIT - PIPE SOUTH VALVE PIT - TOP WEST VALVE PIT - PIPE WEST VALVE PIT - TOP EAST VALVE PIT - TOP Location EAST VALVE PIT - TOP JERSEY BARRIER 2 JERSEY BARRIER 3 JERSEY BARRIER 4 JERSEY BARRIER 5 LADDER LADDER LADDER SHOVEL SHOVEL FENCE FENCE Room INSIDE TANK 207-05122003-00-168 TANK 207-05122003-00-153 TANK 207-05122003-00-154 TANK 207-05122003-00-155 TANK 207-05122003-00-158 TANK 207-05122003-00-165 TANK 207-05122003-00-166 TANK 207-05122003-00-167 TANK 207-05122003-00-169 TANK 207-05122003-00-156 TANK 207-05122003-00-157 TANK 207-05122003-00-160 TANK 207-05122003-00-162 TANK 207-05122003-00-163 TANK 207-05122003-00-159 TANK 207-05122003-00-161 TANK 207-05122003-00-164 HIEBERT, DOUG G Sample Number

BERYLLIUM AND B < 0.1000_UG/100CM2

03Z1588

WIPE

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INSIDE

TANK 207-05122003-00-170

Industrial Hygiene Information System Sample Results Report

SURFACE

11 of 15

Page:

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Туре	Rin No †	Analyte	Concentration
<i>KH</i> HIEBERT, DOUG G							
TANK 207-05122003-00-171		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-172		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-173		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-174		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-175				BLANK	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-176		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-177		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-178		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-179		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-180		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-181		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-182		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-183		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-184		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-185		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-186		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-187		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-188		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2

158

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

Industrial Hygiene Information System Sample Results Report

Page:

12 of 15

SURFACE

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
КН							
HIEBERT, DOUG G							
TANK 207-05122003-00-189		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-190		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-191		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-192		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-193		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-194		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-195		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-196		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-197		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-198		INSIDE	SHEAR IN CAB ON FLOOR	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-199		INSIDE	SHEAR IN CAB ON CONTROLS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-200		INSIDE	SHEAR IN CAB ON INTAKE	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-201		INSIDE	SHEAR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-202		INSIDE	SHEAR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-203		INSIDE	SHEAR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 UG/100CM2
TANK 207-05122003-00-204		INSIDE	SHEAR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-205				BLANK	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-206		INSIDE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2

Industrial Hygiene Information System Sample Results Report

SURFACE

13 of 15

Page:

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Туре	Rin No	Analyte	Concentration
<i>KH</i> HIEBERT, DOUG G							
TANK 207-05122003-00-207	INSIDE	DE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-208	INSIDE	DE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-209	INSIDE	DE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-210	INSIDE	DE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-211	INSIDE	DE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-212	INSIDE	DE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-213	INSIDE	DE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-214	INSIDE	DE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-215	INSIDE	DE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-216	INSIDE	DE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-217	INSIDE	DE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-218	INSIDE	DE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-219	INSIDE	DE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-220	INSIDE	DE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-221	INSIDE	DE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-222	INSIDE	JO.	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-223	INSIDE	DE.	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-224	INSIDE	10E	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

SURFACE

14 of 15 Page:

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Туре	Rin No †	Analyte	Concentration
<i>KH</i> HIEBERT, DOUG G							
TANK 207-05122003-00-225		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-226		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-227		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-228		INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-229		INSIDE	PROCESSOR IN CAB ON CONTROLS WIPE	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-230		INSIDE	PROCESSOR IN CAB ON INTAKE	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-231		INSIDE	PROCESSOR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-232		INSIDE	PROCESSOR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-233		INSIDE	PROCESSOR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-234		INSIDE	PROCESSOR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-235				BLANK	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-236		INSIDE	DECON PAN	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-237		INSIDE	DECON PAN	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-238		INSIDE	DECON PAN	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000_UG/100CM2
TANK 207-05122003-00-239		INSIDE	DECON PAN	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-240		INSIDE	WEST CONCRETE PAD	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-241		INSIDE	WEST CONCRETE PAD	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-242		INSIDE	WEST CONCRETE PAD	WiPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System

Sample Results Report

15 of 15

Page:

SURFACE

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Concentration Analyte Rin No Location Room Work Pkg Sample Number

HIEBERT, DOUG G

INSIDE INSIDE TANK 207-05122003-00-243

TANK 207-05122003-00-244

BERYLLIUM AND B < 0.1000_UG/100CM2 BERYLLIUM AND B < 0.1000 _ UG/100CM2

03Z1625 03Z1625

WIPE WIPE

WEST CONCRETE PAD WEST CONCRETE PAD

> Building Subtotal: 254 Hygienist Subtotal: 254

Company Subtotal: 254

Grand Total 254

IHISR_SAMPLE_RESULTS_REPORT

Date: 05/29/2003

ATTACHMENT E

865 High Bay Brokk Demolition Test White Paper



Building 865 Closure Project

Small-Scale Floor Demolition Test

Prepared By

G. M. Aldrich, RISS Radiological Engineering

Michael Richen, CIH, RISS Industrial Safety & Hygiene

May 29, 2003

Preparation, Review and Approval

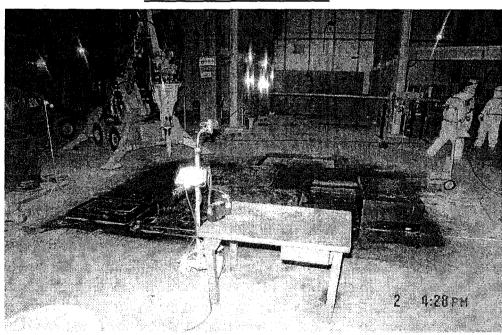
2000	5/29/03
Prepared by G. M. Aldrich, RISS Radiological Engineering	// Date
m & Ruchen	5/29/03
Prepared by M. H. Richen, CIH, RISS IS&H	// Date
// Signature Obtained //	5/19/03
Reviewed by R. English, RISS Radiological Engineering	// Date
Ar Comm	5/29/03
Reviewed by, B. Williamson, 865 Rad Safety Supervisor	// Date
a affi	
X Billing)	5/29/03
Concurrence, R. Bittinger, 865 Health and Safety Manager	// Date
Centes Dean	5/29/03
Concurrence, C. Bean, RISS Radiological Safety Manager	// Date
On 4. Colo	5/29/03
Concurrence, B. Corb, ECC Project Manager	// Date

Approval, M. Lesinski, Bldg. 865 Project Manager // Date

Executive Summary

A small-scale floor and floor-seam demolition test was conducted on the Bldg. 865 High Bay contaminated cement slab to assess potential impacts to workers & the environment during future dismantlement. Contaminated slab/pit removal is likely to occur after demo of the uncontaminated walls and ceiling. The High Bay floor has widespread fixed contamination from depleted Uranium (DU) and low levels of Beryllium (Be) contamination and must be disposed of as LLW. Although the slab will be preencapsulated, its dismantlement might occur in a condition open to the surrounding environment.

A Brokk Model-250 hydraulic hammer was used to dismantle a contaminated floor area of about 200 Sq. Ft., including floors, pedestals and floor seams with high levels of fixed beta contamination and low levels of Be contamination. Some floor-seam caulking removal was also done with a hammer chisel after the Brokk tests. Contamination from both DU and Be was isolated before the Brokk test by applying a fixative layer of CC-Wet and CC-Fix $\sim 1/8''$ thick. Low-volume radiological air & Be air samplers surrounded the test area on each side.



Conditions Before Test

Overall findings from all tests conducted are summarized below.

- No airborne radioactivity above 2% DAC was seen on either low-volume air samplers nor personnel lapel samplers, despite major disturbance of floor & dispersal of dust. Airborne concentrations of radiological contaminants were far below the 30% DAC 10 CFR-835, <u>Occupational Radiation Protection</u> regulatory threshold for respirators.
- Removable alpha and removable beta contamination did not increase from floor disturbances.
- No beryllium was detected from either area air samplers surrounding Grid #9, or from individual lapel air samplers worn by test personnel.
- Despite the significant amount of dust produced during the test removable beryllium contamination on floors was less after the test than before.

165

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Background

The Bldg. 865 upper walls and ceiling remain relatively uncontaminated from past DOE operations, and are expected to pass Pre-Demolition Surveys (PDS) and be disposed of as sanitary wastes. The 22,500 Sq. Ft. High Bay concrete slab floor has elevated fixed beta contamination from DU and low levels of removable Be contamination on it. The floor-seams or "cracks" exhibit the highest levels of fixed beta activity, that in some locations approach 700,000 dpm/100 cm 2 . Removable Be levels on the High Bay slab range between < 0.1 micrograms (μ g)/100 cm 2 to about 2 μ g/100 cm 2 .

Because of low removable DU and Be contamination levels of the High Bay slab, it has been proposed that with appropriate engineering controls, the slab could be safely demolished "in the open" with heavy industrial equipment, after wall and ceiling release & dismantlement, within occupational and environmental guidelines. It was felt that if radiological & Be contamination were properly isolated under an aggressive fixative layer, and with normal dust suppression techniques, only minimal contaminants should disperse during heavy equipment demolition operations. The degree of contamination dispersal should be negligible, and not occasion any additional subsurface soil remediation or hazards to construction workers performing demolition operations.

To test potential effects of slab demolition, a small-scale floor demolition test was done in Grid #9 of the Bldg. 865 High Bay. Grid #9 was selected as a location of relatively high average fixed DU beta contamination both of flat surfaces and within cracks. The purpose of the testing conducted was to assess potential bounding impacts upon the workers & the environment should slab demolition operations be undertaken in the open.

Test Preparation

The Brokk-test was done on May 2, 2003 PM Shift, with essential personnel present. The test purpose was to simulate conservative bounding effects for future floor demolition of the slab. It was decided that heavy cement dust from the Brokk hydraulic chisel and hammer-chisel crack disturbance tests should not be suppressed by wetting & misting, in order to allow bounding airborne conditions for DU and Be contamination spread to be measured. Airflow tests done immediately prior to starting floor demo identified the predominant direction of airflow being from the Northwest to the Southeast. Fixed area samplers were placed in the downwind zone. Test personnel as much as practicable avoided the downwind zone. Air samplers for both Be and radiological contaminants were placed very close to the test area perimeter (~1 meter from the edge), as well as further out at about 3 meters. Four area Be air samplers were put into place on each side of the test area, and two low-volume air samplers deployed for radiological purposes (on the south & west sides of the test area). Test personnel were monitored with individual personnel air samplers for both Be and radiological contamination. Personnel wore full Anti-Cs, respirators, hoods, taped openings, and multiple gloves & booties. Full time RCT and IH&S coverage were present throughout the entire test duration of 1-hour.

Radiological Results

Table 1 summarizes radiological conditions before fixative application. Fifty swipes for removable contamination were taken on floors, pedestals & cracks. All swipes were < MDA for both removable alpha & beta. Direct alpha readings at thirty floor locations averaged < 100 dpm/100 cm² total alpha. Fixed beta contamination in cracks was substantially higher than on flat surfaces of the slab, with average fixed beta activity seen on the slab running ~ 8500 dpm/100 cm², and in the pedestal sides & cracks ~ 96,000 dpm/100 cm². The maximum level of beta contamination seen in cracks was ~ 605,000 dpm/100 cm². Some of the crack destructive testing was done using the Brokk hydraulic pick, and some done manually with an electric hammer chisel. However, under all test conditions, no generation of airborne nor dispersal of removable

Table 1

Contamination Results - Before Tes

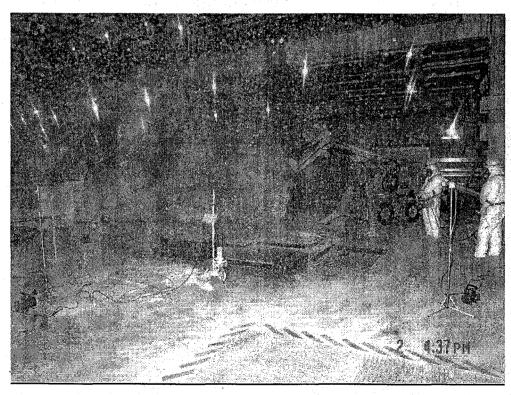
<u> </u>	Contamination	Results -	- Before Test	
Survey	Fixed Beta			
Location	dpm/100 cm ²		Comments	
NW Pad	26,250	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
NW Pad	7,000	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
NW Pad	7,000	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
N. Center Pad	7,350	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
N. Center Pad	6,300	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
N. Center Pad	7,018	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
N. Center Pad	5,250	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
N. Center Pad	15,400	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
N. Center Pad	7,700	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
N. Center Pad	5,373	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
N. Center Pad	4,200		eta activity before CC-Wet & CC-Fix	
N. Center Pad	3,850	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
N. Center Pad	5,250		eta activity before CC-Wet & CC-Fix	
Floor Indent	13,563	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
Floor Indent	7,700	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
Floor Indent	7,700	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
Floor Indent	5,250	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
SE Pad	10,500	Direct/fixed be	eta activity before CC-Wet & CC-Fix	
South Crack	54,000	Caulk & expar	nsion joint removed by hammer chisel	
South Crack	65,000	Caulk & expar	nsion joint removed by hammer chisel	
South Crack	144,000	Caulk & expar	nsion joint removed by hammer chisel	
South Crack	604,800	Caulk & expar	nsion joint removed by hammer chisel	
South Crack	72,000	Caulk & expar	nsion joint removed by hammer chisel	
South Crack	54,000	Caulk & expansion joint removed by hammer chisel		
South Crack	72,000	Caulk & expansion joint removed by hammer chisel		
NE Crack	32,400	Caulk & expansion joint removed by hammer chisel Caulk & expansion joint removed by hammer chisel		
NE Crack	10,800		nsion joint removed by hammer chisel	
NE Crack	10,800		nsion joint removed by hammer chisel	
NE Crack	12,960		nsion joint removed by hammer chisel	
NE Crack	23,040	Caulk & expar	nsion joint removed by hammer chisel	
	Contaminat	tion Summ	nary Data	
Alpha & B	Beta Swipes <mda< td=""><td>50</td><td>MDAs for removable A&B varied</td></mda<>	50	MDAs for removable A&B varied	
Av	erage Alpha Direct	< 100	dpm/100 cm ² fixed alpha	
F	loor Average Beta	8,481	dpm/100 cm ² fixed beta	
Cı	rack Average Beta	96,317	dpm/100 cm ² fixed beta	
	rack Average Beta	43,615	dpm/100 cm ² fixed beta	
	Maximum Reading	604,800	dpm/100 cm ² fixed beta	

contamination from DU was noted. There were no above-limit airborne results on any low-volume air sampler or personnel lapel air sampler deployed. This, coupled with the conservative bounding conditions of tests, indicates that with appropriate fixative, slab & pit destructive removal should also not generate any contamination or airborne radioactivity above DOE limits. This will need corroboration by the Site Clean Air Act compliance staff, to ensure that 40 CFR-Part 61, Subpart H (National Emission Standards for Emissions of Radionuclides Other Than Radon for Department of Energy Facilities) is complied with, and that emissions of radionuclides to the ambient air shall not cause any member of the public to exceed an effective dose equivalent of 10 mrem/yr.

Table 2
<u>Airborne Radioactivity Readings – During Test</u>

Description	Low Volume	Personal Lapel	DAC Reading	Comments
Grid #9, South Side	X		< 1%	On destruction test boundary
Grid #9, West Side	Х		< 1%	On destruction test boundary
Rad Engineer		Х	1.7%	RE had highest net activity after decaying sample - 2.8 dpm
IH&S		Х	1.2%	
RCT		X	1.3%	
Mock Person		Х	< 1%	At west boundary in airflow path

Conditions At Beginning of Test





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Beryllium Results

Project Industrial Hygiene collected removable beryllium wipe and air samples as part of the small-scale test. Surface sample collection consisted of removable beryllium wipe samples in the area of the test prior to and after the break up of concrete. Air sampling consisted of area air monitors surrounding the test area and lapel samplers on test personnel.

SURFACE SAMPLE RESULTS

Removable beryllium wipe samples were collected in a four by five pattern within Grid #9. A grid in building 865 High Bay was defined as a $30' \times 30'$ square area bounded by four columns. The test area was located in the North Central section of Grid #9, in the NE portion of the High Bay. The detection limit for removable beryllium wipes was $0.1 \,\mu\text{g}/100\text{cm}^2$.

	Table 3						
	Removable Beryllium Wipe Results						
	Sample	Sample	Pre Level	Sample	Post Level	Comments	T
	Location	ID#	µg/100 cm ²	ID#	µg/100 cm²		
	A1	44	0.36	302	<0.1	Floor	
	A2	34	0.57	303	<0.1	Floor	
	A3	33	0.14	309	<0.1	Floor	
	A4	24	0.19	305	<0.1	Floor	
	A5	23	0.13	306	<0.1	Floor	
	B1	43	0.31	307	<0.1	Floor	
	B2	35	<0.1	308	<0.1	Floor	
	B3	32	0.11	309	<0.1	Floor	
	B3	<u> </u>	•	326	<0.1	Debris pile	
	B4	25	0.23	301	<0.1	Floor	
	B5	22	<0.1	311	<0.1	Floor	
	C1	42	<0.1	312	<0.1	Floor	
	C2	36	<0.1	313	<0.1	Floor	
	СЗ	31	<0.1	314	<0.1	Floor	
	C3	•	-	327	<0.1	Debris pile	
	C4	26	0.3	315	<0.1	Floor	
	C4	-	-	328	<0.1	Debris pile	
	C5	21	<0.1	316	<0.1	Floor	
	D1	41	0.17	317	0.34	Floor	
	D1	-	•	321	<0.1	Floor	
	D2	37	0.3	318	<0.1	Floor	
	D3	30	<0.1	319	<0.1	Floor	
	D4	27	<0.1	320	<0.1	Floor	
	D5	20	0.14	322	<0.1	Floor	
				:	<0.1	Outer arm Brokk	900
					<0.1	Left outrigger Brokk	
1110					<0.1	Hammer tip Brokk	
					<0.1	Top of Pump 3081	
	Numbe	r non detects	8	-	28	< 0.1 µg/100 cm ²	
	Ave	rage reading	0.18		0.08	μg/100 cm ²	
		Maximum		0.6	µg/100 c	m ²	

Twenty pre-test wipe samples were collected in Grid #9. Twelve of these samples had detectable levels of beryllium ranging from 0.13 to 0.57 μ g/100cm², which was typical of ambient removable Be conditions in the Bldg. 865 High Bay.

Twenty-nine post-test samples were collected. In addition to wipe samples at all pre-test locations, additional Be wipes were taken of the "Boundary Worker" sample pump, in concrete debris piles, and on the outer arm, front left outrigger and the hammer tip of the Brokk. One sample located in the Southwest corner of Grid #9 indicated $0.34~\mu g/100 cm^2$. Since this location was not encapsulated, this reading may have simply reflected High Bay background Be conditions. All other post-test Be wipe results were non-detectable. Results after the test were less than the levels collected before, indicating that there was not significant levels of "fixed Be" within the cement matrix or cracks disturbed.

AIR SAMPLE RESULTS

Air sampling consisted of the collection of area samples surrounding the test and lapel samples on all personnel present. Air samples were collected for the approximate one-hour duration of the test. Airflow direction as determined by smoke tubes during the test was from the Northeast to the Southwest. Four area air samples were collected surrounding the test and one area air sample was collected to approximate a stationary worker standing to the West of the Brokk hammer. This sample was downwind. All area air sample results were non detectable for beryllium.

Table 4

<u>Area Be Air Sampler Results</u>

Sample location	μg /M³
Area sample West side	<0.063
Area sample North side	<0.043
Area sample East side	<0.042
Area sample South side	<0.039
Boundary Worker ¹	<0.080

All individual lapel air samplers on test personnel were non-detectable for beryllium. There were no detectable beryllium air samples during any portions of these tests.

Table 5
Lapel Be Air Sampler Results

Sample location	μg /M³	- 1	
 Sample 6, RCT	<0.08		
Sample 7, IH&S	<0.08		
Sample 14, Brokk Operator	<0.08		
Sample 17, Rad Engineer	< 0.08		

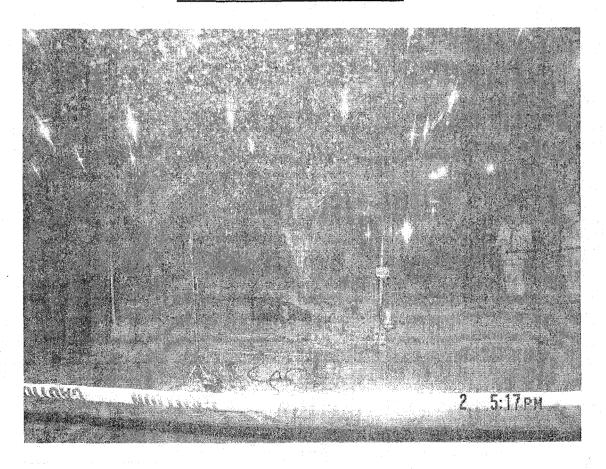
¹ A limiting case "Boundary Worker" lapel sampler was placed on the table 3' above floor level at the west edge of Grid 9 throughout the Brokk Test, directly in the airflow path. This location is considered "bounding" in that it sampled the highest amounts of airborne debris from the Brokk.



Post-Test Radiological Contamination

Table 6 summarizes contamination conditions after the Brokk test and also includes a summary of contamination from several follow-on electric hammer chisel destructive tests on crack sealant materials. Over 65 swipes for removable contamination were taken on floors pedestals & cracks in Grid #9 following the Brokk and the hammer-chisel tests. All of these swipes except two counted < MDA for both removable alpha & removable beta activity. Two of the post-test swipes read about 63 dpm removable alpha activity, an insignificant amount. General area direct alpha readings at thirty floor locations within Grid #9 remained unchanged, still averaging < 100 dpm/100 cm². Fixed beta of general areas in Grid #9 decreased (due to beta self-shielding from disturbed cement) to an average of 2600 dpm/100 cm², as compared with the pre-test average on floor of ~ 8500 dpm/100 cm². Crack & floor-seam average fixed beta contamination levels increased in most cases, suggesting that "chasing" beta contamination downwards between slab segments might be labor-intensive and ineffective.

Conditions Near End of Test



1

Best Available Copy

Table 6

Contamination Results - After Test

Survey	Fixed Beta	lammane	
Location	dpm/100 cm ²		
			Comments
Grid 9 Area	4,320		concrete readings after Brokk test
Grid 9 Area	3,600		concrete readings after Brokk test
Grid 9 Area	3,960		concrete readings after Brokk test
Grid 9 Area			concrete readings after Brokk test
Grid 9 Area			concrete readings after Brokk test
Grid 9 Area	3,960	1	concrete readings after Brokk test
Grid 9 Area	985	2	concrete readings after Brokk test
Grid 9 Area Grid 9 Area	550		concrete readings after Brokk test
Grid 9 Area	334 334	1	concrete readings after Brokk test concrete readings after Brokk test
Grid 9 Area	895	1	concrete readings after Brokk test
Grid 9 Area	334	1	concrete readings after Brokk test
Grid 9 Area	334		concrete readings after Brokk test
Grid 9 Area	2,389	6	concrete readings after Brokk test
Grid 9 Area	The second secon		concrete readings after Brokk test
Grid 9 Area		I .	concrete readings after Brokk test
Grid 9 Area	4,140	1	concrete readings after Brokk test
Grid 9 Area		I .	concrete readings after Brokk test
Grid 9 Area)	concrete readings after Brokk test
Grid 9 Area		l .	concrete readings after Brokk test
Grid 9 Area	8,015	General Area	concrete readings after Brokk test
Grid 9 Area	334	General Area	concrete readings after Brokk test
Grid 9 Area	375	General Area	concrete readings after Brokk test
Grid 9 Area	4		concrete readings after Brokk test
Grid 9 Area			concrete readings after Brokk test
South Crack		1	chisel removal of caulk & joint
South Crack	1		chisel removal of caulk & joint
South Crack		The state of the s	chisel removal of caulk & joint
South Crack			chisel removal of caulk & joint
South Crack	La contraction of the contractio		chisel removal of caulk & joint
South Crack South Crack			chisel removal of caulk & joint chisel removal of caulk & joint
NE Crack		The state of the s	chisel removal of caulk a joint chisel removal of caulk & joint
NE Crack			chisel removal of caulk & joint
NE Crack			chisel removal of caulk & joint
NE Crack			chisel removal of caulk & joint
			ation Summary Data
Alpha & Bet	a Swipes <mda< td=""><td>65</td><td>2 removable alpha swipes ~ 63 dpm; all beta swipes <mda< td=""></mda<></td></mda<>	65	2 removable alpha swipes ~ 63 dpm; all beta swipes <mda< td=""></mda<>
	ge Alpha Direct	< 100	dpm/100 cm ² fixed alpha
	r Average Beta	2,630	dpm/100 cm2 fixed beta
	k Average Beta	175,287	dpm/100 cm2 fixed beta
Floor + Crac	ck Average Beta	55,387	dpm/100 cm ² fixed beta
	ximum Reading	396,000	dpm/100 cm ² fixed beta
		and Annual September 1915 Annual September 1	



Conclusions & Recommendations

The small-scale tests performed showed that even under "worst-case" simulated demolition conditions with heavy equipment, there should not be any detectable spreads of beryllium contamination, depleted uranium contamination, nor airborne radioactivity from any contaminants tested for during this demonstration. Standard dust control techniques such as suppressant water spray would further mitigate the spread of dust from the slab.

Even at a location of relatively high averaged fixed beta radioactivity, receiving substantial disturbance of the cement & slab crevices and no mitigating dust suppression or wetting agents, there was still no airborne detected above 2% DAC by any of the radiological air samplers. The test protocol achieved much heavier cement dust dispersal & mechanical disturbance of slab contaminated surfaces than might typically occur with heavy equipment. There was no detectable increase in post-work levels of removable or total depleted Uranium alpha or beta contamination, nor of Be surface contamination.

The overall findings of the test were that dismantlement of the low-level Bldg. 865 High Bay contaminated slab in the open should not cause any above limits radiological or Beryllium impacts upon the site, or any radiological or Beryllium hazards for construction personnel performing the demolition work.

This approach will need to be validated by approved dispersion modeling performed by Clean Air Act compliance group staff.

ATTACHMENT F

Recent 865 High Bay In-process Radiological Floor and Pit Survey Data

865 High Bay Floor TSAs

	1	
		Beta TSA
Grid	Location #	(dpm/100cm ²)
1	1	2,045
1	2	2,212
1	3	2,515
1	4	1,345
1	5	2,070
1	6	3,275
1	7	4,580
1	8	6,620
1	9	7,046
1	10	10,000
1	- 11 12	18,000
2 2	13	32,000 25,200
2	14	18,000
2 2 2	15	22,000
2	16	72,000
2	17	68,000
2 2	18	72,000
3	19	2,294
3	20	1,929
3	21	3,190
3	22	3,800
3	23	2,268
3	24	2,348
4	25	6,335
4	26	38,500
4	27	10,374
4	28	15,411
4	29 30	5,600
	31	42,000
4	32	9,023
4	33	10,574
5	34	3,528
5	35	2,455
5	36	7,651
5	37	7,255
5	38	2,105
5	39	1,990
5	40	2,537
5	41	2,206
5	42	1,825
5	43	14,550
6	44	18,100

865 High Bay Floor Summary Statistics

	Min. Beta	Max. Beta	Avg. Beta
	TSA	TSA	TSA
Grid	(dpm/100cm ²)	(dpm/100cm ²)	(dpm/100cm ²)
1	1,345	18,000	5,428
2	18,000	72,000	44,171
3	1,929	3,800	2,638
4	5,600	42,000	16,545
5	1,825	14,550	4,610
6	2,580	20,000	9,644
7	1,890	12,325	3,612
8	24,000	192,000	55,840
9	60,000	660,000	226,500
10	1,074	23,169	4,142
11	2,750	172,900	41,845
12	2,400	52,000	12,856
13	4,200	300,000	43,489
14	5,400	480,000	81,843
15	29,200	156,000	79,600
16	984	45,200	8,606
17	2,550	22,225	5,881
18	2,700	14,161	7,155
19	105,000	490,000	242,500
20	985	16,300	3,115
21	425	3,590	870
22	600	1,640	1,139
23	2,175	205,260	30,952
24	2,265	274,560	44,866
25	4,500	60,000	13,036

^{*} Routine and In-Process Smear surveys were <5,000 dpm/100cm2, except one smear: (location 252 = 7,400 dpm/100cm2).

Page 1 of 6 5/28/03

865 High Bay Floor TSAs

		
		Beta TSA
Grid	Location #	(dpm/100cm ²)
6	45	20,000
6	46	10,700
6	47	2,580
6	48	5,100
6	49	11,200
6	50	18,100
6	51	7,420
6	52	5,650
6	53	4,260
6	54	2,970
7	⁻ 55	2,670
7	56	12,325
7	57	2,935
7	58 59	2,060
7	60	3,225 2,760
7	61	2,735
7	62	2,405
7	63	1,890
8	64	26,000
8	65	60,000
8	66	25,600
8	67	36,000
8	68	28,000
8	69	44,000
8	70	48,000
8	71	86,000
8	72	24,000
8	73	40,000
8	74	32,000
8	75	60,000
8	76	92,000
8	77	192,000
8	78	44,000
9	79	92,000
9	80	332,000
9	81 82	92,000 192,000
9	83	80,000
9	84	66,000
9	85	60,000
9	86	132,000
9	87	316,000
9	88	180,000
	L	100,000

865 High Bay Floor Summary Statistics

	Min. Beta	Max. Beta	Avg. Beta
	TSA	TSA	TSA
Grid	(dpm/100cm ²)	(dpm/100cm ²)	(dpm/100cm ²)

Page 2 of 6 5/28/03

865 High Bay Floor TSAs

	1	
		Beta TSA
Grid	Location #	(dpm/100cm²)
9	89	660,000
9	90	516,000
10	91	2,043
10	92	2,268
10	93	1,920
10	94	1,176
10	95	1,554
10	96	2,175
10	97	1,074
10	98	2,076
10	- 99 - 100	2,586
10	100	5,520
11	101 102	23,169
11	102	172,900
11	103	16,300 92,000
11	105	16,200
11	106	6,800
11	107	82,300
11	108	53,200
11	109	7,420
11	110	5,750
11	111	4,680
11	112	2,750
12	113	4,200
12	114	4,600
12	115	52,000
12	116	2,400
12	117	27,000
12	118	4,500
12	119	12,900
12	120	3,900
12	121	4,200
13	122	300,000
13	123	24,000
13	124	18,000
13	125	7,500
13	126	4,800
13 13	127	21,000
13	128	7,400
13	129	4,500
14	130 131	4,200
14	132	19,800
14	132	39,000

865 High Bay Floor Summary Statistics

	Min. Beta	Max. Beta	Avg. Beta
	TSA	TSA	TSA
Grid	(dpm/100cm ²)	(dpm/100cm ²)	(dpm/100cm²)

Page 3 of 6 5/28/03



865 High Bay Floor TSAs

	Dete TOA
Location #	Beta TSA (dpm/100cm²)
	480,000
	5,400
	5,800
	7,800
	315,000
	10,500
	17,500
	10,500
	17,500
	17,500
	87,500
	112,000
	52,800
	40,000
	42,800
	100,000
	72,000
	106,000
	153,200
	64,000
	156,000
	40,000
	50,400
 	29,200
	104,000
	104,000
	45,200
	31,700
	1,710
162	2,000
163	984
164	1,355
165	2,646
166	5,484
167	1,035
168	1,000
169	1,550
170	2,710
171	22,225
172	3,355
173	2,710
174	2,550
175	4,130
176	2,950
	163 164 165 166 167 168 169 170 171 172 173 174 175

865 High Bay Floor Summary Statistics

	Min. Beta	Max. Beta	Avg. Beta
<u> </u>	TSA	TSA	TSA
Grid	(dpm/100cm ²)	(dpm/100cm ²)	(dpm/100cm ²)



Page 4 of 6 5/28/03

865 High Bay Floor TSAs

<u> </u>	T	<u> </u>
		Beta TSA
Grid	Location #	(dpm/100cm ²)
17	177	6,420
18	178	4,423
18	179	2,700
18	180	8,277
18	181	4,297
18	182	14,161
18	183	9,074
19	184	490,000
19	185	245,000
19	186	105,000
19	⁺ 187	157,500
19	188	273,000
19	189	112,000
19	190	315,000
20	191	985
20	192	1,455
20	193	1,525
20	194 195	16,300
20	196	1,665 1,815
20	190	1,075
20	198	1,831
20	199	1,385
21	200	450
21	201	500
21	202	640
21	203	570
21	204	3,590
21	205	475
21	206	425
21	207	690
21	208	490
22	209	1,040
22	210	1,465
22	211	1,040
22	212	800
22	213	600
22	214	1,415
22	215	815
22	216	1,640
22	217	1,435
23	218	5,205
23	219	2,175
23	220	4,683

865 High Bay Floor Summary Statistics

The state of the s	Min. Beta	Max. Beta	Avg. Beta	
	TSA	TSA	TSA	
Grid	(dpm/100cm ²)	(dpm/100cm ²)	(dpm/100cm²)	



Page 5 of 6 5/28/03

865 High Bay Floor TSAs

		Beta TSA
Grid	Location #	(dpm/100cm ²)
23	221	5,634
23	222	3,714
23	223	3,081
23	224	3,996
23	225	9,012
23	226	3,156
23	227	94,560
23	228	205,260
24	229	28,860
24	230	5,457
24	231	23,892
24	232	10,596
24	233	5,874
24	234	2,265
24	235	3,468
24	236	2,688
24	237	4,209
24	238	274,560
24	239	81,960
24	240	94,560
25	241	8,650
25	242	14,150
25	243	4,620
25	244	5,470
25	245	11,820
25	246	8,650

865 High Bay Floor Summary Statistics

	Min. Beta TSA	Max. Beta	Avg. Beta TSA		
Grid	(dpm/100cm ²)	(dpm/100cm ²)	(dpm/100cm ²)		

Page 6 of 6 5/28/03

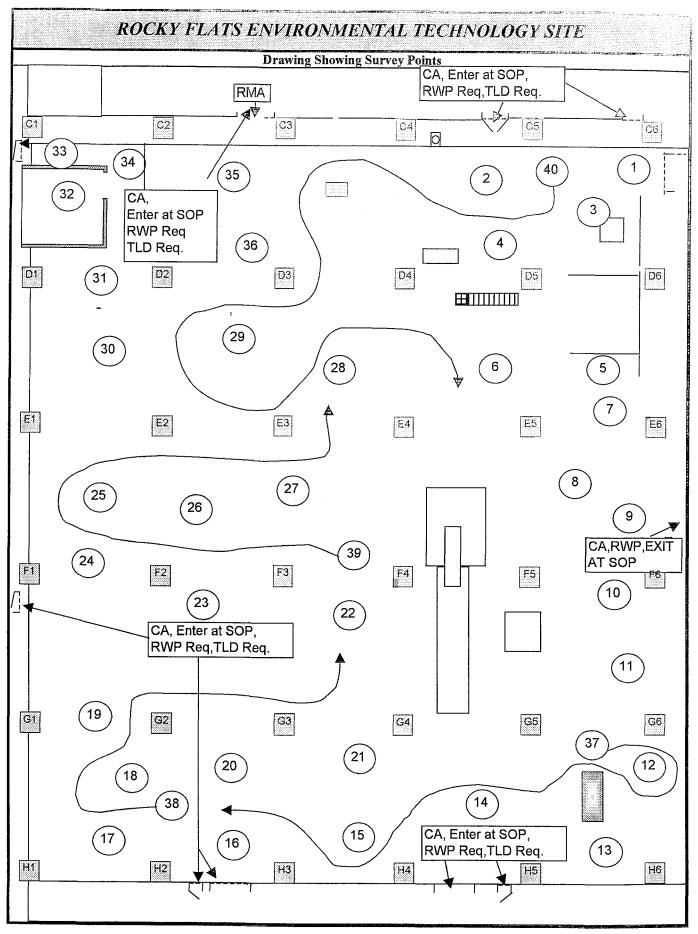
TSA Data Ranges (dpm/100 cm²)

			ACTION AND ADMINISTRATION OF THE PARTY OF TH	-	THE STATE OF THE S	TECH	THE STATE OF THE S	ekolőkoromos akoló nos ti aktirk	err (n. 1600). Salaritatur (n. 1600). Salaritatur (n. 1600).	September 1990
		INSTRUM	IENT DATA							
		Mfg.			NE Electra	Survey typ	e: Conta	mination		
Model	2929	Model	2929	Model	DP-6	Building:	865			
	176102					Location:	High Ba	у		
Cal Due	6/9/03	Cal Due	6/11/03	Cal Due	7/9/03	Purpose:	Weekly	Routine (8	65-2W-CA	.)
Bkg.	0.3 cpm α	Bkg.	0.6 cpm α	Bkg.	5 cpm α					
	y 34.4 %							03-86	5-001	
	18 dpm α									·
						1	4/22/03	Time:	8:30,	AM
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra		·		-/	
_	2929	Model		Model						
	176102		176082	-						
		_	6/11/03					1))	ĭ
	70.2 cpm β					RCT.	N/Δ	1	N/A I	N/A
	y 40.8 %						rint name		nature	Emp.
MDA		*	205 dpm α	-		1	mit maine	Dig	gnature	ismp.
WIDA —	203 αρπ α	IVIDA	203 dpm α		3/2 dpm p	L				
				SURVE	Y RESULT	ΓS.				
				SURVE	Y RESULT				RETA	
- 1	1.00	:ATION/DF	SCRIPTION			ALPHA	Wine	Swing	BETA Direct	Wing
Swipe #	LOC	:ATION/DE	SCRIPTION		Swipe	ALPHA Direct	Wipe	Swipe	Direct	
- 1	LOC	:ATION/DE			Swipe	ALPHA				
# 1 2	LOC		OR		Swipe	ALPHA Direct dpm/100cm2	dpm/wipe	dpm/100cm2	Direct dpm/100cm2	dpm/wip
# 1 2 3	LOC	FLOO FLOO	OR OR OR		Swipe dpm/100cm2 <18 <18 <18	ALPHA Direct dpm/100cm2 NA NA NA	dpm/wipe NA NA NA	dpm/100cm2 <205 <205 <205	Direct dpm/100cm2 NA NA NA	dpm/wig NA NA NA
1 2 3 4	LOC	FLOG FLOG FLOG	OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA NA NA NA NA	dpm/wipe NA NA NA NA	dpm/100cm2 <205 <205 <205 <205 <205	Direct dpm/100cm2 NA NA NA NA NA NA	dpm/wip NA NA NA NA
# 1 2 3 4 5 5	LOC	FLOO FLOO FLOO FLOO	OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA NA NA NA NA NA NA NA	dpm/wipe NA NA NA NA NA	dpm/100cm2 <205 <205 <205 <205 <205 <205	Direct dpm/100cm2 NA	NA NA NA NA NA
# 1 2 3 4 5 6	LOC	FLOO FLOO FLOO FLOO FLOO	OR OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wip NA NA NA NA NA NA
# 1 2 3 4 5 6 7	LOC	FLOO FLOO FLOO FLOO FLOO FLOO	OR OR OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wip NA NA NA NA NA NA NA
# 1 2 3 4 5 6	LOC	FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR OR OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wip NA NA NA NA NA NA
# 1 2 3 4 5 6 7 8	LOC	FLOO FLOO FLOO FLOO FLOO FLOO	OR OR OR OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wiji NA NA NA NA NA NA NA
# 1 2 3 4 5 6 7 8 9 10	LOC	FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wip NA NA NA NA NA NA NA NA NA
# 1 2 3 4 5 6 7 8 9 10 11 12	LOC	FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wiji NA
# 1 2 3 4 5 6 7 8 9 10 11 12 13	LOC	FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wiji NA
# 1 2 3 4 5 6 7 8 9 10 11 12 13 14	LOC	FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wiji NA
# 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	LOC	FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	MANANANANANANANANANANANANANANANANANANAN	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wij NA NA NA NA NA NA NA NA NA NA NA NA
# 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	LOC	FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wij NA
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# 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	LOC	FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wij NA NA NA NA NA NA NA NA NA NA NA NA NA

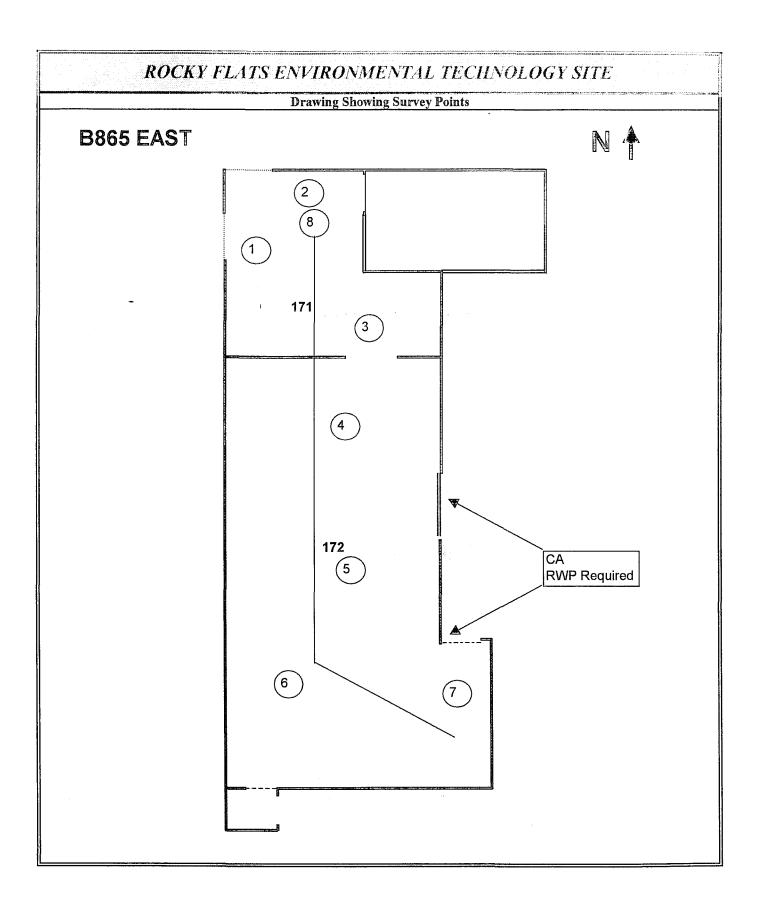
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

SURVEY RESULTS

			ALPHA			BETA	
Swipe	LOCATION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
#		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2		dpm/wipe
21	FLOOR	<18	NA	NA	<205	NA	NA
22	FLOOR	<18	NA	NA	<205	NA	NA
23	FLOOR	<18	NA	NA	<205	NA	NA
24	FLOOR	<18	NA	NA	<205	NA	NA
25	FLOOR	<18	NA	NA	<205	NA	NA
26	FLOOR	<18	NA	NA	<205	NA	NA
27	FLOOR	<18	NA	NA	<205	NA	NA
28 _	FLOOR	<18	NA	NA	<205	NA	NA
29	FLOOR	<18	NA	NA	<205	NA	NA
30	FLOOR	<18	NA	NA	<205	NA	NA
31	FLOOR	<18	NA	NA	<205	NA	_ NA
32	FLOOR	<18	NA	NA	<205	NA	NA
33	FLOOR	<18	NA	NA	<205	NA	NA
34	FLOOR	<18	NA	NA	<205	NA.	NA
35 36	FLOOR	<18	NA	NA NA	<205	NA	NA NA
37	FLOOR	<18	NA NA	NA	<205	NA NA	NA 500
38	FLOOR	NA NA	NA NA	90	NA	NA NA	500
39	FLOOR	NA NA	NA NA	84	NA NA	NA NA	830
40	FLOOR FLOOR	NA NA	NA NA	94 <62	NA NA	NA_	500 <372
41	NA	NA NA	NA NA	NA	NA NA	NA NA	NA
42	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
43	NA NA	NA NA	NA NA	NA	NA NA	NA NA	NA NA
44	NA NA	NA NA	NA NA	NA	NA NA	NA NA	NA
45	NA NA	NA NA	NA	NA	NA	NA NA	NA
NA	NA NA	NA NA	NA	NA	NA	NA	NA
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NA	NA	NA	NA	NA	NA	NA	NA
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		INSTRUM	ENT DATA	er kogar siske-karanda konkra.	THE REPORT OF THE PARTY OF THE	**************************************	TOWNSTON WAS ARREST TOWN	TTTREETEN	T <mark>CT-Troug brandenú</mark> n big ng alating Webbing.	en i regio ella e nte monogram ica
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra	Survey tv	pe: Conta	mination		
			2929	Model	DP-6	Building:				·
Serial #	176102	Serial #	176082	Serial #	3248			71/172	······································	
Cal Due					7/9/03	- 3			65-2\N-CA)
Bkg.					5 dpm α		raconay	rtouino (o	211 01	·)
	y 34.4 %	Efficiency	35.5 %	Efficience	cv 214 %	RWP#		03-86	5_001	
	18 dpm α						····	03-00.	J-00 I	
	. o apin a		, o apm a		OZ upin a	Date:	1/22/03	Time:	090	חח
Mfø	Ludlum	Mfσ	Ludlum	Mfg	NE Electra	Date.	7/22/03	I IIIC.		
	2929		2929	Model		R				
	176102	-			3248	-				
			6/11/03		7/9/03	- L				
	70.2 dpm β	_				DCT.	NΙΛ	1	NA /	NA
	y 40.8 %					-	Print name		nature	Emp. #
MDA	205 dpm β	=	205 dpm β			4	THE HAIRE	315	gnature	ешр. #
PRN/REN Comment	#: NA s: Isotope of	concern is	DU.							·
			- 1.07254	SURV	EY RESUL	<u></u>				
Swipe						<u>ALPHA</u>			BETA	
#	LOC	ATION/DE	SCRIPTION	l	Swipe	Direct	Wipe	Swipe	Direct	Wipe
					dpm/100cm2					
2		see m			<18	NA NA	NA NA	<205	NA NA	NA
3		see m			<18 <18	NA NA	NA NA	<205 <205	NA NA	NA NA
4		see n	······································		<18	NA NA	NA NA	<205	NA NA	NA
5		see m			<18	NA NA	NA NA	<205	NA NA	NA
6		see m			<18	NA	NA	<205	NA	NA
7		see n			<18	NA	NA	<205	NA	NA
8		see n			NA	NA	<62	NA	NA	<372
9		NA NA			NA NA	NA	NA NA	NA	NA	NA
10		NA NA			NA NA	NA NA	NA NA	NA NA	NA NA	NA
12		NA NA			NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
13		NA NA			NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
14		NA NA			NA NA	NA NA	NA NA	NA NA	NA NA	NA
15		NA NA			NA NA	NA	NA NA	NA NA	NA NA	NA
16		NA NA			NA NA	NA	NA	NA NA	NA	NA
17		N.A	1		NA	NA	NA	NA	NA	NA
18		N/			NA	NA	NA	NA	NA	NA
19		NA.			NA	NA	NA	NA	NA	NA
20 Date Revi	ewed: <u>4/22</u> ,	/03_ RS S	Supervision:	_	NIA	NIA	NIA	810		NIA.
					Print Name			Signature		∈mp.#





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Mfg.	Ludlum	Mfg.			NE Electra	Survey tyr	ae Alnha	, beta Conta	mination	
Model	2929	Model			DP-6	Building:		, ocia conia	umanon	
	176082		176102		3247	Location:		11 and 172	•	
Cal Due			6-9-03	-	5-13-03	1		contamination	n area routi	ne
Bkg.			0.1 cpm α		Weekly	Omammanc	ni arca routi	HC .		
_	35.5 %					7		03-865	5-001	
	$\frac{18 \text{ dpm } \alpha}{}$		$\frac{33.5 - 76}{18}$ dpm α		$\frac{21.7}{34}$ dpm α	"		05 005	7-001	
	то арпта		10 upin u	WID71	5+ upin u	Date.	4-17-03	Time:	091	15
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra				7)	
Model	2929	Model	2929	Model	DP-6	RC'				
Serial #	176082	Serial #	176102	Serial #	3247			<u> </u>		
Cal Due	6-11-03	Cal Due	6-9-03	Cal Due	5-13-03]		_		-
Bkg.	79.6 cpm β	Bkg.	71.2 cpm β	Bkg.	533 cpm β	RCT:	N/A	/ 1	_{N/A} /	N/A
Efficienc	38.6 %	Efficiency	41.4 %	Efficiency	32.2 %	P:	rint name	Sig	mature	Emp. #
MDA	205 dpm β	MDA	205 dpm β	MDA	342 dpm β					
	N#: ts Isotope of co	N/A oncern is de	pleted uraniur		EY RESULT	TS				
			pleted uraniur						DECL	
Commen	ts Isotope of co	oncern is de		SURVI	EY RESULT	<u>ALPHA</u>	Wina	Swing	BETA Direct	Wino
Commen	ts Isotope of co	oncern is de	pleted uraniur	SURVI	EY RESULT	ALPHA Direct	Wipe	Swipe	Direct	T
Commen	ts Isotope of co	oncern is de	ESCRIPTION	SURVI	EY RESULT	ALPHA Direct dpm/100cm2	dpm/wipe	Swipe dpm/100cm2 <205	Direct dpm/100cm2	dpm/wipe
Swipe #	ts Isotope of co	oncern is de	ESCRIPTION	SURVI	Swipe	ALPHA Direct		dpm/100cm2	Direct	·
Swipe #	ts Isotope of co	CATION/DE Floo	ESCRIPTION or or	SURVI	Swipe dpm/100cm2 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 N/A N/A N/A	dpm/wipe N/A N/A N/A	dpm/100cm2 <205 <205 <205	Direct dpm/100cm2 N/A N/A N/A	dpm/wipe N/A N/A N/A
Swipe # 1 2 3 4	ts Isotope of co	CATION/DE Floc Floc Floc Floc	ESCRIPTION or or or	SURVI	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 N/A N/A N/A N/A N/A	dpm/wipe N/A N/A N/A N/A <34	dpm/100cm2 <205 <205 <205 <205 <205	Direct dpm/100cm2 N/A N/A N/A N/A N/A	dpm/wipe N/A N/A N/A <342
Swipe # 1 2 3 4 5	ts Isotope of co	CATION/DE Floc Floc Floc Floc Floc	ESCRIPTION or or or or	SURVI	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 N/A N/A N/A N/A N/A N/A N/A	dpm/wipe N/A N/A N/A N/A N/A <34 N/A	dpm/100cm2 <205 <205 <205 <205 <205 <205	Direct dpm/100cm2 N/A N/A N/A N/A N/A N/A N/A N/A	dpm/wipi N/A N/A N/A N/A <342 N/A
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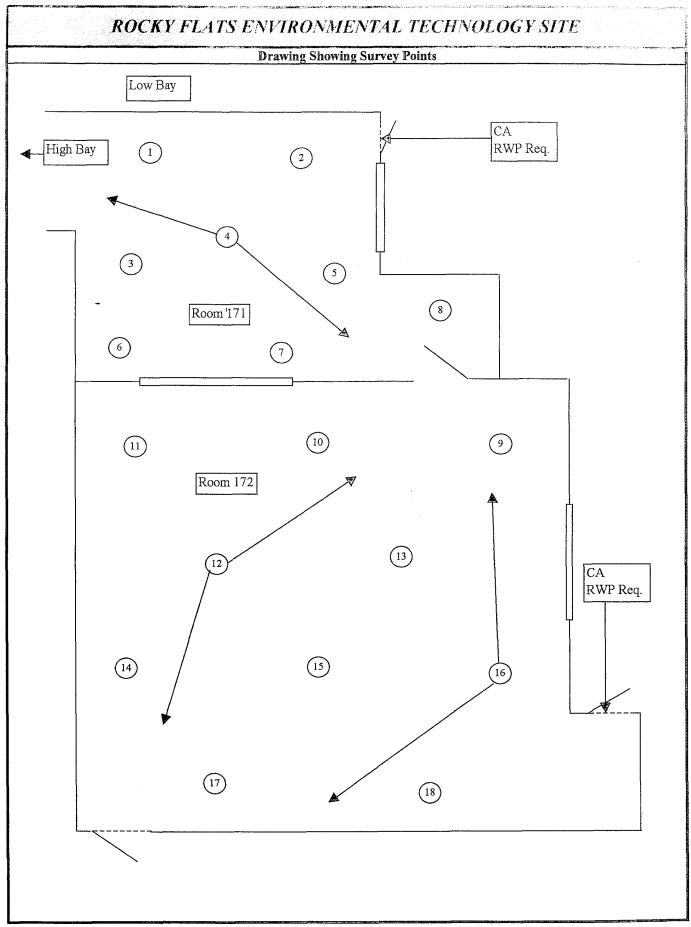
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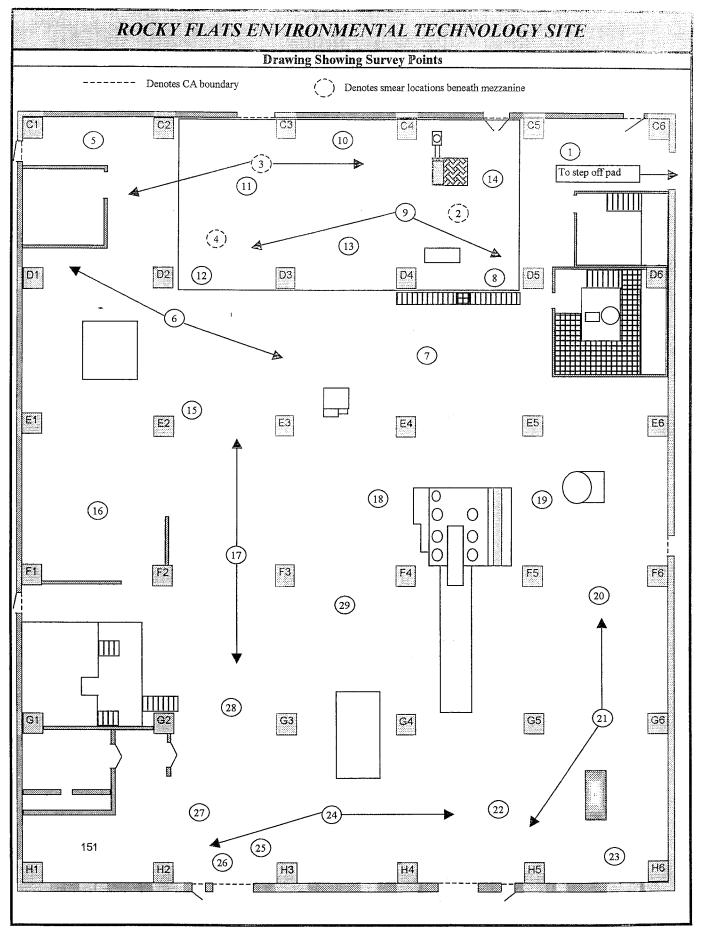
Date Reviewed: 4/17/03





		INSTRUM	ENT DATA			Control of the Contro				improduction of the			
Mfg.			Ludlum		VE Electra	Survey tvi	e: Alpha.	beta Conta	mination				
Model	2929		2929			Building: 865							
Serial#			176102			1 ~		(various lo	cations)				
_		_	6-9-03	_		1			on area routi	ne			
-	0.2 cpm α	_	***************************************	_		p 0 5 0 .		011111111111111111111111111111111111111	on area reach				
	35.5 %					RWP#		03-865	5-001				
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	10 upin a	1411571	10 upili u	1VIID71	J∓ upin α	Date:	4-17-03	Time:	091	5			
Mfo	Ludlum	Mfg.	Ludlum	Mfg.	JE Electra	Date.	4-17-03	Time.	091				
	2929	Model		Model									
-				_									
_			176102			P	rint name	Sig	gnature	Emp.			
_	6-11-03					DOT	3.7/4	1 ,	1	3.7/1			
	79.6 cpm β			******						N/A			
	38.6 %			-		Р	rint name	Sig	mature	Emp.			
шA	205 dpm β	MDA	205 dpm β	MDA	342 dpm β								
Comment	s Isotope of co	oncern is de	pleted uraniur										
Comment	s Isotope of co	oncern is de	pleted uraniur		Y RESULT	<u> </u>							
				SURVE		ALPHA			BETA				
			pleted uranium	SURVE	Y RESUL I	ALPHA Direct	Wipe	Swipe	BETA Direct	Wip			
Swipe #		CATION/DE	ESCRIPTION	SURVE	Swipe	ALPHA Direct dpm/100cm2	dpm/wipe	dpm/100cm2	Direct dpm/100cm2	dpm/wi			
Swipe #		EATION/DE	ESCRIPTION	SURVE	Swipe dpm/100cm2 <18	ALPHA Direct dpm/100cm2 N/A	dpm/wipe N/A	dpm/100cm2 <205	Direct dpm/100cm2 N/A	dpm/wi N/A			
Swipe # 1 2		CATION/DE Floo Floo	ESCRIPTION or or	SURVE	Swipe dpm/100cm2 <18 <18	ALPHA Direct dpm/100cm2 N/A N/A	dpm/wipe N/A N/A	dpm/100cm2 <205 <205	Direct dpm/100cm2 N/A N/A	dpm/wi N/A N/A			
Swipe #		CATION/DE Floc Floc Floc	ESCRIPTION or or	SURVE	Swipe dpm/100cm2 <18 <18 <18	ALPHA Direct dpm/100cm2 N/A N/A N/A	dpm/wipe N/A N/A <34	dpm/100cm2 <205 <205 <205	Direct dpm/100cm2 N/A N/A N/A	Wipp dpm/wi N/A N/A <342 N/A			
Swipe # 1 2 3		CATION/DE Floo Floo	ESCRIPTION or or or	SURVE	Swipe dpm/100cm2 <18 <18	ALPHA Direct dpm/100cm2 N/A N/A	dpm/wipe N/A N/A	dpm/100cm2 <205 <205	Direct dpm/100cm2 N/A N/A	dpm/wi N/A N/A			
Swipe # 1 2 3 4		Floo Floo Floo Floo Floo Floo Floo	ESCRIPTION or or or or	SURVE	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 N/A N/A N/A N/A	dpm/wipe N/A N/A <34 N/A N/A <34 N/A <34 A N/A <34	dpm/100cm2 <205 <205 <205 <205 <205	Direct dpm/100cm2 N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	dpm/wi N/A N/A <342 N/A			
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Swipe # 1 2 3 4 5 6 7 8		Floor Mezzanir	ESCRIPTION or or or or or or or or efloor	SURVE	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 N/A	dpm/wipe N/A N/A N/A <34 N/A	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 N/A N/	dpm/wi N/A N/A <342 N/A N/A <342 N/A			
Swipe # 1 2 3 4 5 6 7 8 9		CATION/DE Floc Floc Floc Floc Floc Mezzanir Mezzanir	ESCRIPTION or or or or or or or or efloor	SURVE	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 N/A	dpm/wipe N/A N/A N/A <34 N/A N/A N/A N/A N/A <34 N/A <34 N/A N/A <34 N/A N/A N/A	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 N/A N/	dpm/wi N/A N/A N/A N/A N/A N/A N/A S34:			
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Swipe # 1 2 3 4 5 6 7 8 9 10 11 12 13		Floo Floo Floo Floo Floo Floo Mezzanir Mezzanir Mezzanir Mezzanir Mezzanir Mezzanir	ESCRIPTION or or or or or efloor te floor te floor te floor te floor te floor te floor	SURVE	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 N/A	dpm/wipe N/A N/A	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 N/A N/	dpm/wi N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A			
Swipe #		Floo Floo Floo Floo Floo Floo Mezzanir Mezzanir Mezzanir Mezzanir Mezzanir	ESCRIPTION or or or or or or efloor te floor	SURVE	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 N/A	dpm/wipe N/A N/A	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 N/A N/	dpm/wi N/A N/A			
Swipe # 1 2 3 4 5 6 7 8 9 10 11 12 13 14		Floor Mezzanir	ESCRIPTION or or or or or or or efloor te floor	SURVE	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 N/A	dpm/wipe N/A N/A	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 N/A N/	dpm/wi N/A N/A			
Swipe #		Floor Mezzanir Mezzanir Mezzanir Mezzanir Mezzanir Floor Flo	ESCRIPTION or or or or or te floor	SURVE	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 N/A	dpm/wipe N/A	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 N/A N/	dpm/wi N/A N/A S/A N/A N			
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Swipe #		Floor Mezzanir Mezzanir Mezzanir Mezzanir Mezzanir Floor Flo	ESCRIPTION or or or or or or efloor te floor te floor te floor te floor te floor or or or or or or or or or	SURVE	Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 N/A N/A N/A N/A N/A N/A N/A N/	dpm/wipe N/A	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 N/A N/	dpm/w N/A N/			

	ROCKY FLATS ENV	IRONMENTAI	TECH.	NOLO	GY SITI		And Type Assessment and Parish Assessment and Asses				
	SURVEY RESULTS										
			ALPHA			BETA					
Swipe	LOCATION	Swipe	Direct	Wipe	Swipe Direct Wi						
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21	Floor	<18	N/A	<34	<205	N/A	<342				
22	Floor	<18	N/A	N/A	<205	N/A	N/A				
23	Floor	<18	N/A	N/A	<205	N/A	N/A				
24	Floor	<18	N/A	<34	<205	N/A	<342				
25	Floor	<18	N/A	N/A	<205	N/A	N/A				
27	Floor	<18	N/A	N/A	<205	N/A	N/A				
28	Floor Floor	<18 <18	N/A N/A	N/A N/A	<205 <205	N/A N/A	N/A				
29	Floor	<18	N/A N/A	N/A N/A	<205	N/A N/A	N/A N/A				
30	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A N/A				
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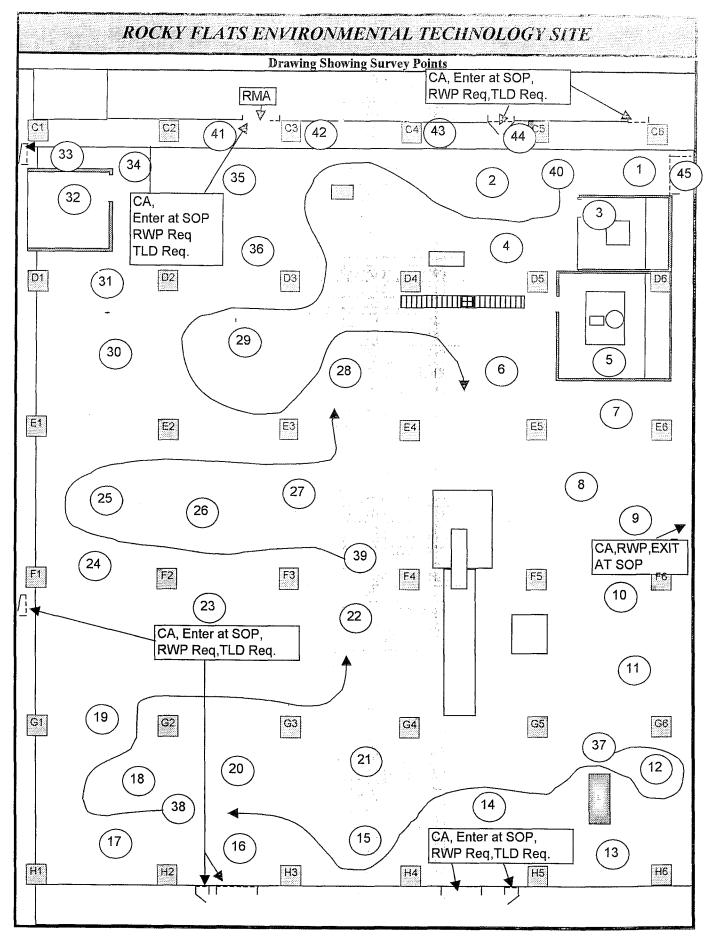


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		INSTRUM	IENT DATA	ette traditioner en en en en en	roods et ook taken en manen konstruction en.	***********************	Control of the State of State	Manager per 1999 Lidisa, madambe	de de la companya da Marillanda di Ademinia da Marillanda de	iz
Mfg.		Mfg.		Mfg.	NE Electra	Survey tv	ne: Conta	mination		
Model	2929		2929	_		Building:				
Serial #			176082			Location:				
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Bkg.		_			4 cpm α		VVCCKIY	Noutille (0	03-211-04)
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	cy <u>34.4 %</u>					KWP#: _		03-003	5-001	
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_	Ludlum	Mfg.			NE Electra					
	2929	Model _			DP-6	RCT				
	176102	-	176082		3248					
	6/9/03		6/11/03		7/9/03			,		
	70.4 cpm β				472 cpm β				V/A /	N/A
Efficience	cy 40.8 %	Efficiency	_38.6 %_	Efficienc	y <u>30.1 %</u>	P	rint name	Sig	nature	Emp. #
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Commer	nts N/A				-5		•			
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ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

SURVEY RESULTS

			\$				
		e e e e e e e e	<u>ALPHA</u>			<u>BETA</u>	
Swipe	LOCATION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
#		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
21	FLOOR	<18	NA	NA	<205	NA	NA
22	FLOOR	<18	NA	NA	<205	NA	NA
23	FLOOR	<18	NA	NA	<205	NA	NA
24	FLOOR	<18	NA	NA	<205	NA	NA
25	FLOOR	<18	NA	NA	<205	NA	NA
26	FLOOR	<18	NA	NA	<205	NA	_NA
27	FLOOR	<18	NA	NA	<205	NA	_NA
	- FLOOR	<18	NA	NA	<205	NA	_NA
29	FLOOR '	<18	NA	NA	<205	NA	NA
30	FLOOR	<18	NA NA	NA	<205	NA	NA
31	FLOOR	<18	NA	NA	<205	NA	NA
32	FLOOR	<18	NA_	NA	<205	NA	NA
33	FLOOR	<18	NA_	NA	<205	NA	NA
34	FLOOR	<18	NA	NA	<205	NA	NA
35	FLOOR	<18	NA	NA	<205	NA	NA
36	FLOOR	<18	NA	NA	<205	NA	NA
37	FLOOR	NA NA	NA	<57	NA_	NA	<345
38	FLOOR	NA	NA	<57	NA	NA	<345
39	FLOOR	NA NA	NA	<57	NA	NA NA	<345
40	FLOOR	NA NA	NA NA	<57	NA 1905	NA NA	<345
41	MEZZANINE	<18	NA_	NA	<205 <205	NA NA	NA NA
42	MEZZANINE	<18	NA NA	NA	<205 <205	NA NA	NA NA
43	MEZZANINE MEZZANINE	<18 <18	NA NA	NA NA	<205	NA NA	NA NA
44 45	FLOOR	<18	NA NA	NA NA	<205	NA NA	NA
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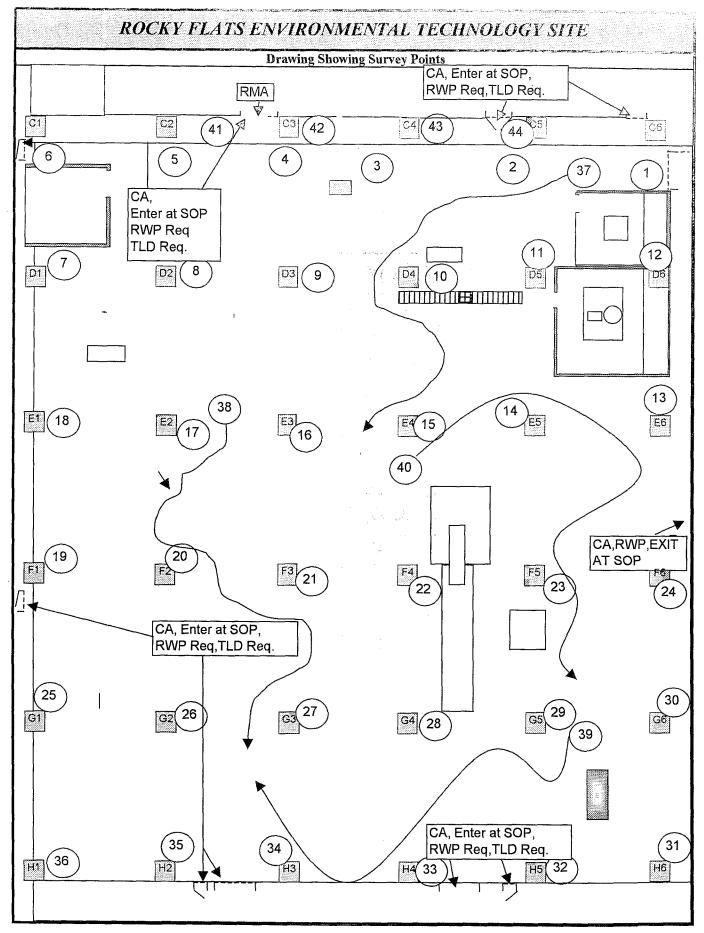


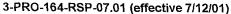
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		INSTRUM	IENT DATA	Manufacture of the State of St	·			♥ \$0 : \$1,500 \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$	Media Peta ni Memerupan dan 1911, giber (100)	TO BEEL PROPERTY AND A MANAGEMENT OF			
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra	Survey typ	e: Conta	ımination					
Model	2929	Model	2929	Model	DP-6	Building:	865						
Serial #	176102		176082		3124								
	6/9/03		6/11/03	-	9/24/03	1			E (865-2W	-CA)			
Bkg.			0.1 cpm α	-	2 cpm α.	Turpose.		17.007	<u> </u>	<u> </u>			
	y 34.4 %					D W/D #.		03-865	5 001				
						KWF #		03-00.)-UU I				
MDA _	18 dpm α	MDA	18 dpm α	MDA —	44 dpm α		4/4/00	m:	40.4				
~ ~~						Date:	4/1/03	Time:	10:0	JU			
	Ludlum	Mfg.			NE Electra								
Model		Model _		Model		R							
Serial #	176102	Serial #	176082	Serial #	3124								
Cal Due	6/9/03	Cal Due _	6/11/03	Cal Due	9/24/03				_				
Bkg	68.5 cpm β	Bkg.	81.9 cpm β	Bkg.	538 cpm β	RCT:	N/A		N/A /	N/A			
Efficience	y 40.8 %	Efficiency	38.6 %	Efficiency	30.8 %	P	rint name	Sig	nature	Emp.			
MDA	205 dpm α	MDA	205 dpm α	MDA	359 dpm β					•			
	nts N/A			QI ID\/F	V DESI II	re .							
	its IVA			SURVE	Y RESULT								
Swipe		ATIONIDE	"CODIDTION			ALPHA	105		BETA				
		:ATION/DE	ESCRIPTION		Swipe	ALPHA Direct	Wipe	Swipe	Direct				
Swipe #					Swipe	ALPHA Direct	dpm/wipe	dpm/100cm2	Direct dpm/100cm2	dpm/wi			
Swipe #		FLO	OR		Swipe dpm/100cm2 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205	Direct dpm/100cm2 NA	dpm/wij			
Swipe #			OR OR		Swipe	ALPHA Direct	dpm/wipe	dpm/100cm2	Direct dpm/100cm2	dpm/wi			
Swipe # 1 2 3 4		FLO0	OR OR OR		Swipe dpm/100cm2 <18 <18	ALPHA Direct dpm/100cm2 NA NA	dpm/wipe NA NA	dpm/100cm2 <205 <205	Direct dpm/100cm2 NA NA	dpm/wi NA NA			
Swipe # 1 2 3 4 5		FLOO FLOO FLOO FLOO	OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA NA NA NA NA NA NA	MANANANANANANANANANANA	dpm/100cm2 <205 <205 <205 <205 <205 <205	Direct dpm/100cm2 NA NA NA NA NA NA NA NA NA	dpm/wi NA NA NA NA NA			
Swipe # 1 2 3 4 5 6		FLOO FLOO FLOO FLOO FLOO	OR OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA NA NA NA NA NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205	Direct dpm/100cm2 NA	dpm/wi NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7		FLOO FLOO FLOO FLOO FLOO FLOO	OR OR OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wi NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7 8		FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR OR OR OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <1	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wi NA NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7 8 9		FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR OR OR OR OR OR OR OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wi NA NA NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7 8 9 10		FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA NA NA NA NA NA NA NA NA N	dpm/wij NA			
Swipe # 1 2 3 4 5 6 7 8 9 10 11		FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wi NA NA NA NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7 8 9 10 11 12		FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA NA NA NA NA NA NA NA NA N	dpm/wij NA NA NA NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7 8 9 10 11		FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA	dpm/wij NA			
Swipe # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA NA NA NA NA NA NA NA NA N	dpm/wi NA NA NA NA NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16		FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA NA NA NA NA NA NA NA NA N	dpm/wi NA NA NA NA NA NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17		FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA NA NA NA NA NA NA NA NA N	dpm/wi NA NA NA NA NA NA NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18		FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA NA NA NA NA NA NA NA NA N	dpm/wi NA NA NA NA NA NA NA NA NA NA NA NA NA			
Swipe # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17		FLOO FLOO FLOO FLOO FLOO FLOO FLOO FLOO	OR O		Swipe dpm/100cm2 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18 <18	ALPHA Direct dpm/100cm2 NA	dpm/wipe NA	dpm/100cm2 <205 <205 <205 <205 <205 <205 <205 <20	Direct dpm/100cm2 NA NA NA NA NA NA NA NA NA N	NA NA NA NA NA NA NA			

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

SURVEY RESULTS

		ļ	<u>ALPHA</u>			<u>BETA</u>	
Swipe	LOCATION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
#		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
21	FLOOR	<18	NA	NA	<205	NA	NA
22	FLOOR	<18	NA	NA	<205	NA .	NA
23	FLOOR	<18	NA	NA_	<205	NA	NA
24	FLOOR	<18	NA	NA	<205	NA	NA
25	FLOOR	<18	NA	NA	<205	NA	NA
26	FLOOR	<18	NA	NA	<205	NA	NA
27	FLOOR	<18	NA	NA	<205	NA	NA
28	FLOOR	<18	NA	NA	<205	NA	NA
29	FLOOR '	<18	NA	NA	<205	NA	NA
30	FLOOR	<18	NA	NA	<205	NA	NA
31	FLOOR	<18	NA	NA_	<205	NA	NA
32	FLOOR	<18	NA	NA	<205	NA	NA
33	FLOOR	<18	NA	NA	<205	NA	NA
34	FLOOR	<18	NA	NA_	<205	NA	NA
35	FLOOR	<18	NA	NA	<205	NA	NA
36	FLOOR	<18	NA	NA	<205	NA	NA
37	FLOOR	NA	NA	<44	NA	NA	<359
38	FLOOR	NA	NA	<44	NA	NA	<359
39	FLOOR	NA	NA	<44	NA	NA	<359
40	FLOOR	NA	NA	<44	NA	NA	850
41	MEZZANINE	<18	NA	NA	<205	NA	NA
42	MEZZANINE	<18	NA	NA	<205	NA	NA
43	MEZZANINE	<18	NA	NA	<205	NA	NA
44	MEZZANINE	<18	NA	NA	<205	NA	NA
NA	NA NA	NA	NA	NA	NA	NA	NA
NA	NA NA	NA	NA	NA	NA	NA	NA
NA	NA NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA_	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA NA	NA	NA NA	NA	NA	NA	NA
NA NA	NA NA	NA	NA NA	NA	NA	NA	NA
NA NA	NA NA	NA NA	NA NA	NA	NA	NA NA	NA
NA	NA NA	NA	NA	NA	NA	NA	NA
NA	NA NA	NA	NA	NA	NA	NA	NA
NA NA	NA NA	NA NA	NA	NA	NA NA	NA	NA
NA	NA NA	NA:	NA	NA	NA	NA	NA NA
NA	NA NA	NA NA	NA NA	NA	NA	NA	NA
NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA	NA
NA	NA NA	NA:	NA	NA	NA NA	NA	NA NA
NA	NA NA	NA	NA NA	NA	NA	NA	NA
NA	NA NA	NA NA	NA NA	NA	NA	NA	NA
NA	NA NA	NA	NA NA	NA	NA NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA_





ATTACHMENT G

865 High Bay Radiological Slab Core Data

Bldg. 865 High Bay

Cement Floor Core Sample Gamma Spectroscopy Data

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	Isotope Sample U-235 Weight	pCi/gm grams	0.45		===			0.53 25	00:00	0.33	0.42	0.33			00:00	0.42	0.36	0.27			0.40	0.32	0.27	0.38	0.00	0:30	0.34	0.00	0.30 29.0	07 388	
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	Isotope Am-241	pCi/gm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Site	Sample ID#	03S0175-	001.002	002.002	003.002	004.002	005.002	006.002		008.002	009.002	010.002	011. 002	012. 002	013.002	014. 002	015.002	016.002	017. 002	018. 002	019. 002	020. 002	021. 002	022. 002	023. 002	024. 002	025.002	026. 002	Average	Maximum	

Prepared by G. M. Aldrich, Radiological Engineering, X7175/Pager 212-4598

Bldg. 865 High Bay

Cement Floor Core Sample Gamma Spectroscopy Data

Notes	
1	Per discussion with R. Boyle, x6575 (Site Sample Team, 1" cores were drilled in 26 locations of the
	Bldg. 865 floor, as shown on the map. The RIN # was 03S0175.
2	The slab thickness varied from 6" in the south corners to 9 1/2" in the NW corner.
3	The 1" cores were split with the top 1.5 - 2" going to gamma spectroscopy for 1 hr counts & bottom portions used for
	chemical analysis (metals, PCBs, VOAs, etc.).
4	Before core drilling, locations were wiped down to remove excess removable Beryllium & Uranium contaminants.
	leaving only fixed contamination in the top zone of the core sample.
5	All Am-241 values recorded were "0.00", with typical MDAs in the 0.35 pCi/qm range.
	This means that there were no indications of Am-241/WgPu above the MDA for any of the 26 core samples.
9	The overall results of the core samples indicates very low concentrations of Uranium in the top region of the slab
	With such low Uranium concentrations, the destruction & removal of the floor slab with heavy equipment should cause minimal
	or no remediation of the soil underneath due to minor low level residual contamination dispersed during slab removal efforts.

ATTACHMENT H

980 Pad InstaCote Demolition Test White Paper

Building 865 Closure Project

980 Pad InstaCote SE Demolition Test

White Paper



Prepared By

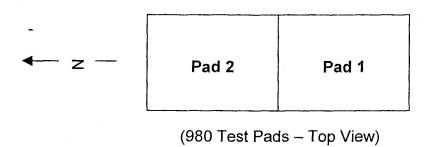
Rock Neveau, RISS Radiological Engineering
May 29, 2003

Preparation, Review, and Concurrence	
	6-9-03
Prepared By Rock Neveau, RISS Radiological Engine	ering // Date
Margar K. Kinoko	6/9/03
Reviewed By Margaret Kimokeo, RISS Engineering /	/ Date
Into Bean	6/11/02
Concurrence, Curtis Bean, RISS Radiological Safety	Manager // Date
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DATA.	6/16/03
Approval, M. Lesinski, Building 865 Project Manager	// Date

Executive Summary

A small-scale demolition test was conducted at the 980 Rubble Pile Area slab to assess InstaCote SE polyurea coating as an alternative material to protecting the slab of B865 during the proposed demolition activities.

The test slab area was divided into two sections (Pad 1 and Pad 2). Pad 1 had multiple layers of product (pink powder, CC Fix, and a top coat of InstaCote SE). Pad 2 had a single layer of InstaCote SE sprayed directly onto the clean slab.



The test consisted of several phases conducted in the following order:

- 1. Very large concrete (with re-bar & conduit encased) re-bar sections were elevated high above Pad 1 and Pad 2 (approximately 15 20 feet) and dropped directly onto the pads.
- Bucket loads of debris were then dumped aggressively onto the remaining areas of both pads to produce approximately 3 feet of concrete rubble.
- Large pieces of concrete were size reduced using the trackmounted processor over the pads.
- 4. The track mounted processor was driven back-and-forth over the remaining 3 feet of rubble (both pads).
- 5. The track-mounted processor was driven onto the center of the remaining rubble and articulated (turned) both clockwise and counter-clockwise.
- 6. The rubble was removed using a rubber-tired backhoe.
- 7. The track-mounted processor was driven over the entire surface of the remaining InstaCote SE polyurea coating pad and articulated.

The condition of both pads was inspected between each step listed above.

The overall findings of the test are summarized below.

- Pad 1 and Pad 2 coatings protected the underlying slab from the drop test. No pink powder was observed on the materials that were dropped onto Pad 1.
- Pad 1 (multiple coatings pad) experienced peeling and lifting of the black InstaCote SE top-coat during size reduction activities of the rubble. The underlying coating of CC Fix was also brought up attached to the InstaCote SE top layer.
- No concrete was brought up or compromised in any manner from the lifting of the InstaCote. The InstaCote SE (and fixative/pinkpowder layer at Pad 1) peeled smoothly away from the concrete and did not disturb or damage the concrete slab in any manner.
- The InstaCote SE on Pad 2 remained intact during all activities –
 including the stage were the track-mounted processor drove
 directly onto Pad 2 and articulated (or turned) on the pad.

The goal of the test was to determine if InstaCote SE polyurea coating and/or a combination of CC Fix topped with InstaCote SE polyurea coating was a viable material for protecting B865 slab during the proposed demolition activities. Although the coatings on Pad 1 were peeled away during size reduction and removal of rubble, the underlying slab remained intact and undamaged.

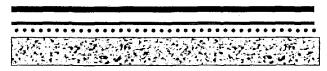
However, test results showed that the initial coating of CC Fix is unnecessary, since it seemed to prevent a strong bond to the underlying concrete slab (as was seen in Pad 1). The application of InstaCote SE directly onto the concrete surface (as in Pad 2) provided the best protection of the underlying concrete slab – even when the track-mounted processor drove directly onto its surface.

The B865 Demolition Project proposes the use of InstaCote SE be sprayed directly onto the floor of B865 to protect the slab during demolition and removal of the walls and ceilings of the facility.

Test Preparation

A section of the remaining exposed slab at the 980 rubble pile was swept clean and divided into two distinct sections. The slabs were prepared in the following manner:

- An area of approximately 40-ft x 20-ft was cleared of all rubble and swept of all remaining dirt and debris.
- Two test pad areas were established Pad 1 and Pad 2
 - Pad 1 a bright pink fluorescent powder was spread over the surface of the concrete, followed by a layer of CC Fix (blue-dyed fixative). Fixative was cured to required hardness. A final coating (1/4-inch minimum thickness) of Instacote SE polyurea was applied.



Pad 1

Pad 2 – remained clean. No powder was placed on Pad 2 due to concerns that the high pressure spray gun used to apply InstaCote SE would spread and re-suspend pink powder over entire jobsite.



Pad 2

- InstaCote SE (black) polyurea was sprayed to a minimum thickness
 of 1/4 inch over the entire surface area of both test pads and
 allowed to cure. The InstaCote SE remained exposed to the
 elements for four days (over the Memorial Day weekend).
- Test Pad 1 and Pad 2 were visually inspected on May 27, 2003 and determined to be ready for the proposed test.

Test Goal: The goal of the test was to determine if InstaCote SE polyurea coating and/or a combination of CC Fix topped with InstaCote SE polyurea coating was a viable material for protecting B865 slab during the proposed demolition activities.

The test was performed under the RFETS Craft Work Package T0110774 - 565. Each stage of the test was photographed and videotaped.

Test Activities & Results

A test agenda was created to document and guide all participants. The agenda had sign-off boxes for each major step and is included in the associated work control document (T0110774 —565).

Heavy equipment similar to what will be used for the demolition of B865 was brought to the 980 Pad Area. Equipment included a large, track-mounted processor and a rubber-tired backhoe with front-end bucket.

Each major step of the test and the corresponding results will be documented as follows.

Step One: Drop Test

The large track-mounted processor was used to lift very large blocks of rubble approximately 15 – 20 feet above the slab. (See Figure 1) Two large chunks were dropped onto Pad 1 and two large chunks were dropped onto Pad 2. Both Pads were inspected immediately after the four objects were dropped.



Figure 1. Track-Mounted Processor Dropping Large Rubble Onto Test Pads

RESULTS

From the four large objects that were dropped onto the test pads, 3 tears in the coating were observed. Pad 1 experienced one large tear from the dropping of a rubble piece that contained two pipe protrusions. The underlying slab experienced a small dent. (See Figure 2) Pad 2 experienced two smaller tears from each object that was dropped. In both instances the underlying slab was of Pad 2 was not chipped or damaged. (See Figure 3)



Figure 2. Pad 1 Results from Drop Test - Small Dent in Underlying Slab



Figure 3 Results from Pad 2 Drop Test - No Damage to Slab

Step Two: Size-Reduction and Removal

The rubber tired backhoe was used to collect material from the existing rubble pile and dump materials directly onto Pads 1 and 2. Equipment operators were instructed to dump materials as aggressively as possible – lifting each bucket high and dumping the material directly onto the pads. (See Figure 4)



Figure 4. Dumping Rubble on the Test Pads

Once the slab was coated to a level of approximately three feet of rubble, the larger chunks that were previously dropped onto the slab in the "drop test" phase were aggressively size reduced over the areas of the pad where it was dropped. Final size activities of this phase of testing involved the removal of the top layer (approximately two feet) of rubble, leaving 12 – 18 inches of rubble remaining on both test pads. Equipment operators were instructed to use aggressive picking and scraping motions with the track-mounted processor to remove the top layer of rubble – as is normally performed during the D&D of buildings at RFETS.

RESULTS

Inspection of Pad 1 and Pad 2 was performed after the aggressive size reduction and removal activities were completed. Pad 1 (south pad) had a large amount of the polyurea topcoat peel up from these activities (approximately 40%). Pad 2 (north pad) had no peeling or damage to the polyurea coating from these activities.

Step Three: Drive Test

This step involved two main phases. Phase 1 had the track-mounted processor drive directly on top of the rubble pile (heading south to north over both pads). The operator was instructed to drive over the top of the rubble, stop, and back up two times.

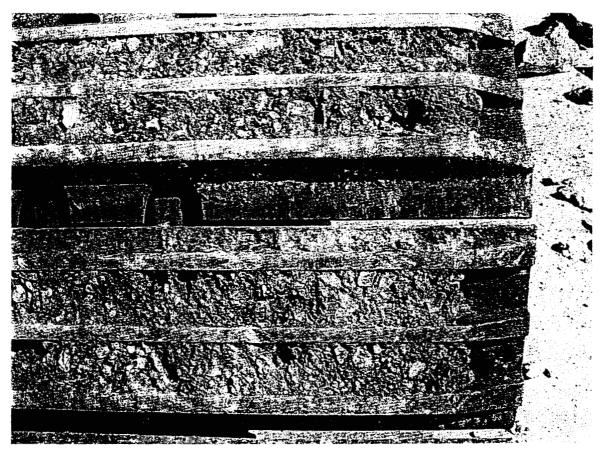


Figure 5. Close-up View of the Treads on the Track-Mounted Processor

RESULTS

Inspection of Pad 1 and Pd 2 was performed after the operator drove two times over the entire surface area of both pads. No additional damage was observed on either pad from these activities.

Step Four: Articulation (Turning) Test

This step required the operator of the track-mounted processor to drive directly on top of the center of the rubble pile and articulate the tracks of the equipment directly on top of the remaining rubble pile. The operator drove from south to north onto the pads, then turned east. After the east-turn, the operator turned the equipment west 270 degrees until the tracks were facing directly south. The operator then drove the track-mounted processor directly off the test pad area, heading south.

RESULTS

Inspection of Pad 1 and Pad 2 was performed after the operator drove drove off of the test pad area. The coating on Pad 1 was almost completely pulled (or peeled) off of the test pad area during this test (90% damage compared to initial total coverage). Pad 2 faired better. Although the rubble blocked total inspection of Pad 2, it appeared to be in tact.



Figure 6. Pad 1 After the Drive and Articulation Phase of Testing - Note Buckling of Coating

Step Five: Removal and Inspection

This step involved the removal of all remaining rubble from the entire test pad area (Pads 1 & 2). A rubber-tired backhoe with front loading bucket was used to remove the rubble.

RESULTS

PAD 1: Pad 1 was inspected after removal of the rubble and debris. The entire coating of polyurea and fixative had been peeled up or otherwise compromised. Many sections of the coating were compromised during previous tests (size reduction and articulation of heavy equipment). Removal activities resulted in additional peeling and removal of most of the coating at Pad 1. However, the underlying concrete slab was not significantly damaged or disturbed.

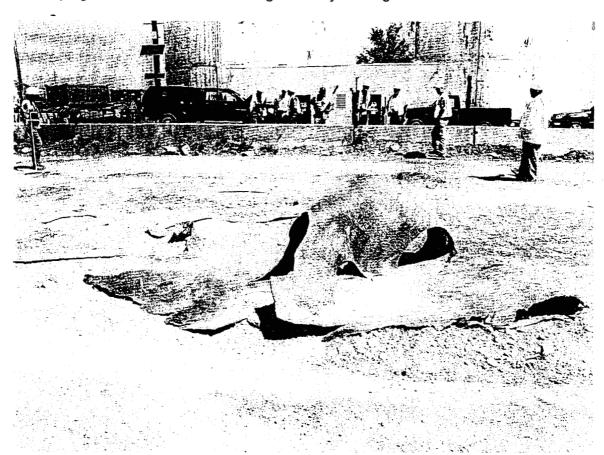


Figure 7. Pad 1 after Rubble Removal - Most of the Coating Has Been Peeled or Removed from Test Activities

PAD 2: Damage (peeling and/or pulling loose) was observed at the far south end of Pad 2. This was attributed to the large areas that were pulled free from the damage occurring at Pad 1. Recall that the top polyurea coating was sprayed over the entire surface of the pad. What happened on Pad 1 affected the very south end of Pad 2; however, the Pad 2 area held tight at the areas that were not affected by the pulling and peeling that occurred at Pad 1. Pad 2 remained intact and undamaged from all previous test activities in areas that were not affected by Pad 1.



Figure 8. Pad 2 after Rubble Removal & Sweeping - Inspection Shows Little or No Damage From All Test Activities

Step Six: Drive Test Directly On Polyurea (Instacote SE) Surface

After the inspection of Pads 1 & 2, the operator was instructed to drive directly onto the remaining polyurea coating (Pad 2, since Pad 1 coating was basically removed from previous test activities). The operator was instructed to drive directly onto the coating on Pad 2 and turn the equipment to the east. The operator then drove off the pad. Later, the track-mounted processor drove back over Pad 2 and exited the 980 Rubble Pile area.

RESULTS

The results of the drive and turn test on the polyurea coating showed little damage to the coating. The top surfaces of the polyurea coating were scuffed and "chewed up" when the equipment turned. However, no cutting or "break through" occurred from this aggressive activity from the tracks of the 110,000-lb piece of equipment.

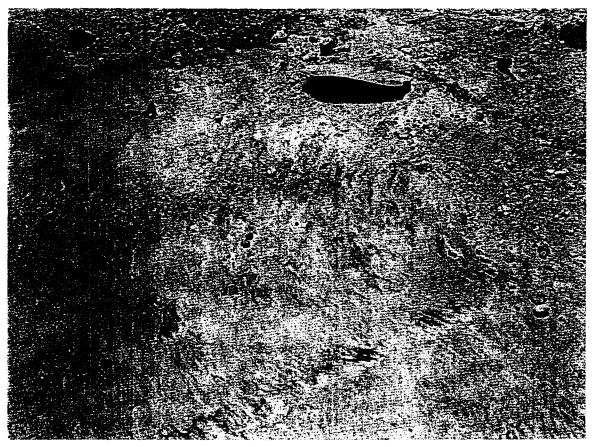


Figure 9. Condition of Pad 2 After Track-Mounted Processor performed the Drive/Articulation Test - Note Track Marks With Minor Scuffing

Conclusions & Recommendations

The goal of the test was to examine the potential use of spray-applied fixatives and coatings for protection of building slabs during demolition activities. It is important to realize that the coatings were expected to experience some damage (cutting, peeling, etc.) from the extreme forces associated with the demolition of facilities at RFETS. The protection of the underlying slab was the primary focus of this test, not the protection of the surfaces of the topcoat material. The fixative (CC Fix) was applied as an undercoating to provide visual cues to identify failure of the Instacote SE.

The test pad area was divided into two different sections – Pad 1 & Pad 2. Pad 1 had a layer of pink powder, a layer of fixative (CC Fix) and a top layer of polyurea (Instacote SE). Pad 2 had a single layer of polyurea (Instacote SE).

PAD 1

Pad 1 experienced significant peeling and removal during all activities of the test. The drop test produced a small dent (or "nick") in the underlying slab. The subsequent phases of testing (size reduction, driving, and articulation of equipment) resulted in almost total removal of the coating. At the end of the testing all rubble was removed, and most of the coating on pad 1 was also removed (90%) at the end of the test. Subject matter experts present at the test site surmise that the additional undercoat of fixative (CC Fix) prevented the topcoat of Instacote SE from firmly adhering to the concrete slab at Pad 1. This allowed for the coating to experience the shifting, buckling, and peeling that occurred from all phases of the test. Approximately 10% of Pad 2 was also removed (or peeled up) from the buckling and peeling associated with Pad 1.

Inspection of the Pad 1 showed little if any damage to the underlying slab from all test activities, with the exception of the small dent that occurred from the drop test.

PAD 2

Pad 2 experienced little if any damage to the Instacote SE polyurea coating. All test activities produced very little peeling or damage to the single layer of Instacote SE, including the final phase of testing which involved the 110,000 lb., track-mounted equipment driving directly onto the surface and articulating. The top surfaces were "chewed up", but no breakthrough occurred.

It was demonstrated during this test that failure of the Instacote SE was readily observable by the equipment operator. Colored paint or bright-colored fixatives are not required as an undercoat to provide the operator with visual cues on the failure of the Instacote SE.

Inspection of Pad 2 showed no damage to the underlying slab from the areas that were removed after the testing was complete. A small section of the polyurea coating was left behind on the north section of Pad 2 to allow for additional inspection of the state of the coating for personnel who were not able to attend the test.

RECOMMENDATIONS

A spray applied coating offer advantages over traditional covering materials, such as steel plating. Worker safety is the foremost advantage, since steel pieces will not be cut and riveted into place for each section of floor. Attaching the plates to contaminated flooring present contamination control issues (PPE, respirators, localized ventilation controls, etc.) and worker exposures. These issues do not exist when using spray-applied coatings to protect the slab of a facility during demolition. The material can be sprayed onto all flooring in less time with a significant reduction in risk for worker injury and exposures to hazardous materials in the slab.

The Building 865 Closure Project recommends the use of a spray-applied, single layer of Instacote SE for protection of the slab during demolition activities. The coating should be a minimum thickness of ¼ inch and applied over all slab surfaces that present contamination concerns during the proposed methods of demolition.

ATTACHMENT I

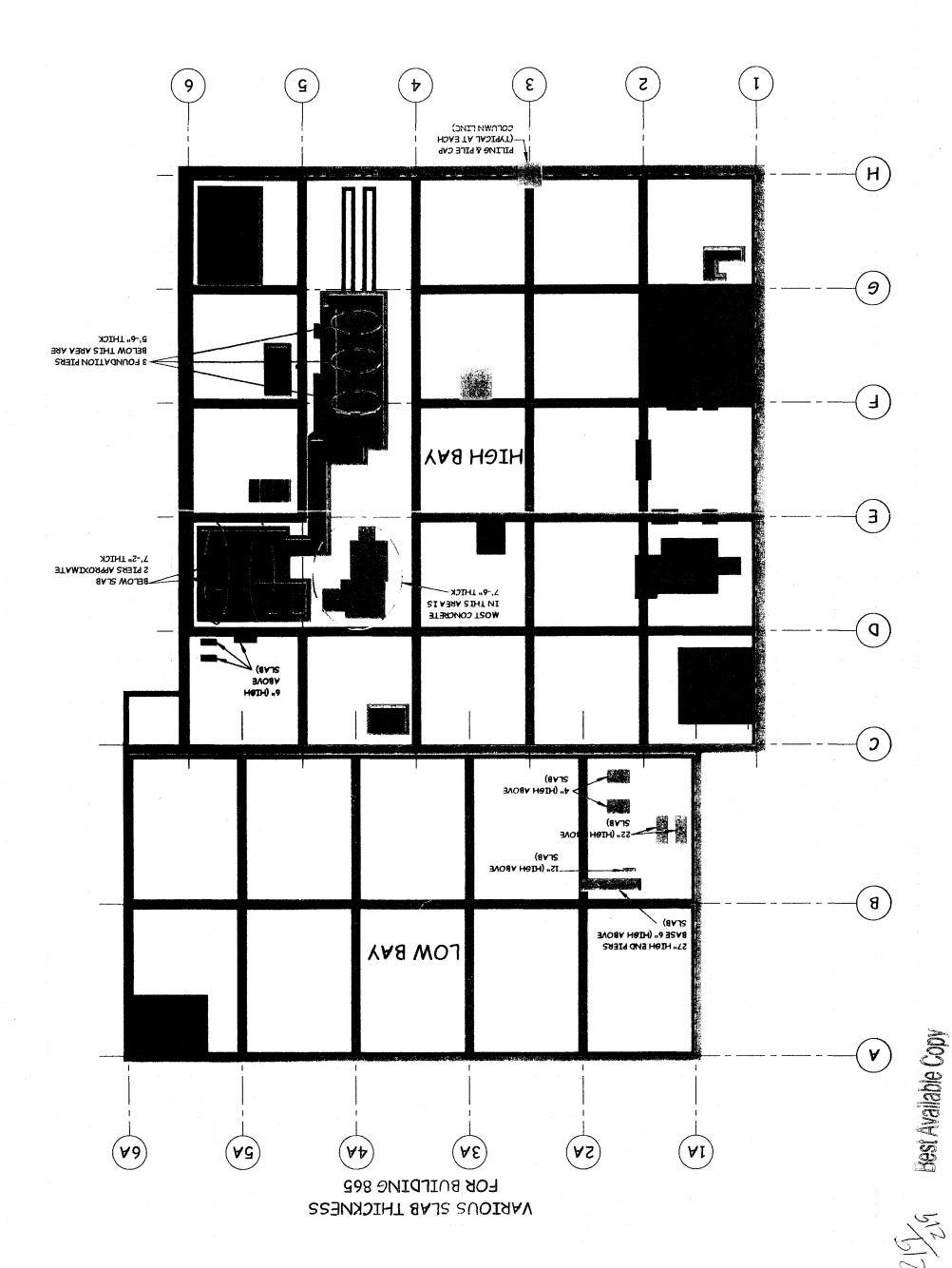
865 Building Slab Thickness Drawing

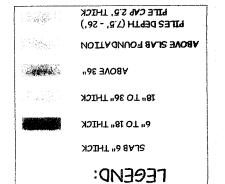
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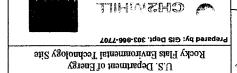
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May 1, 2003

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